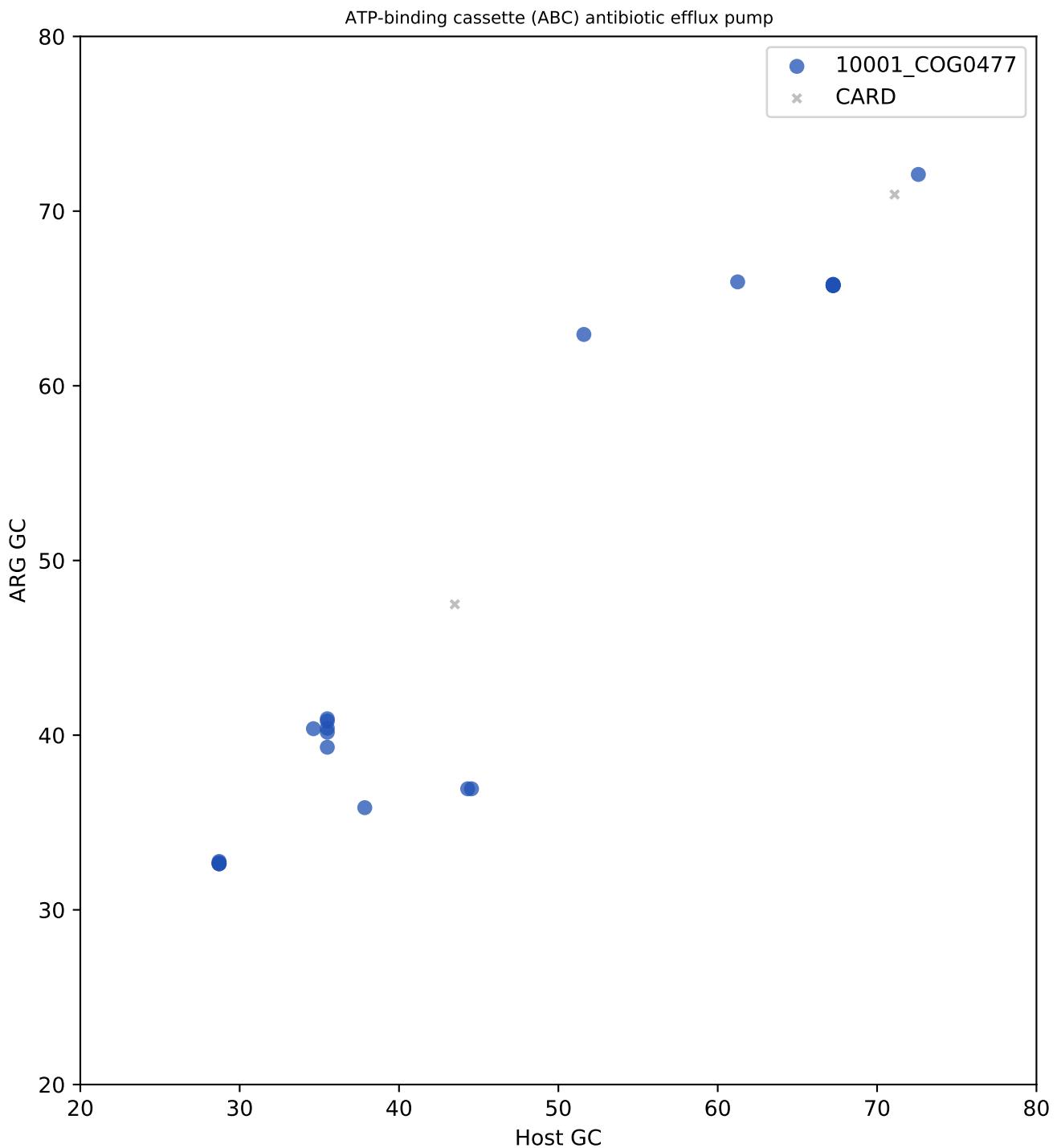
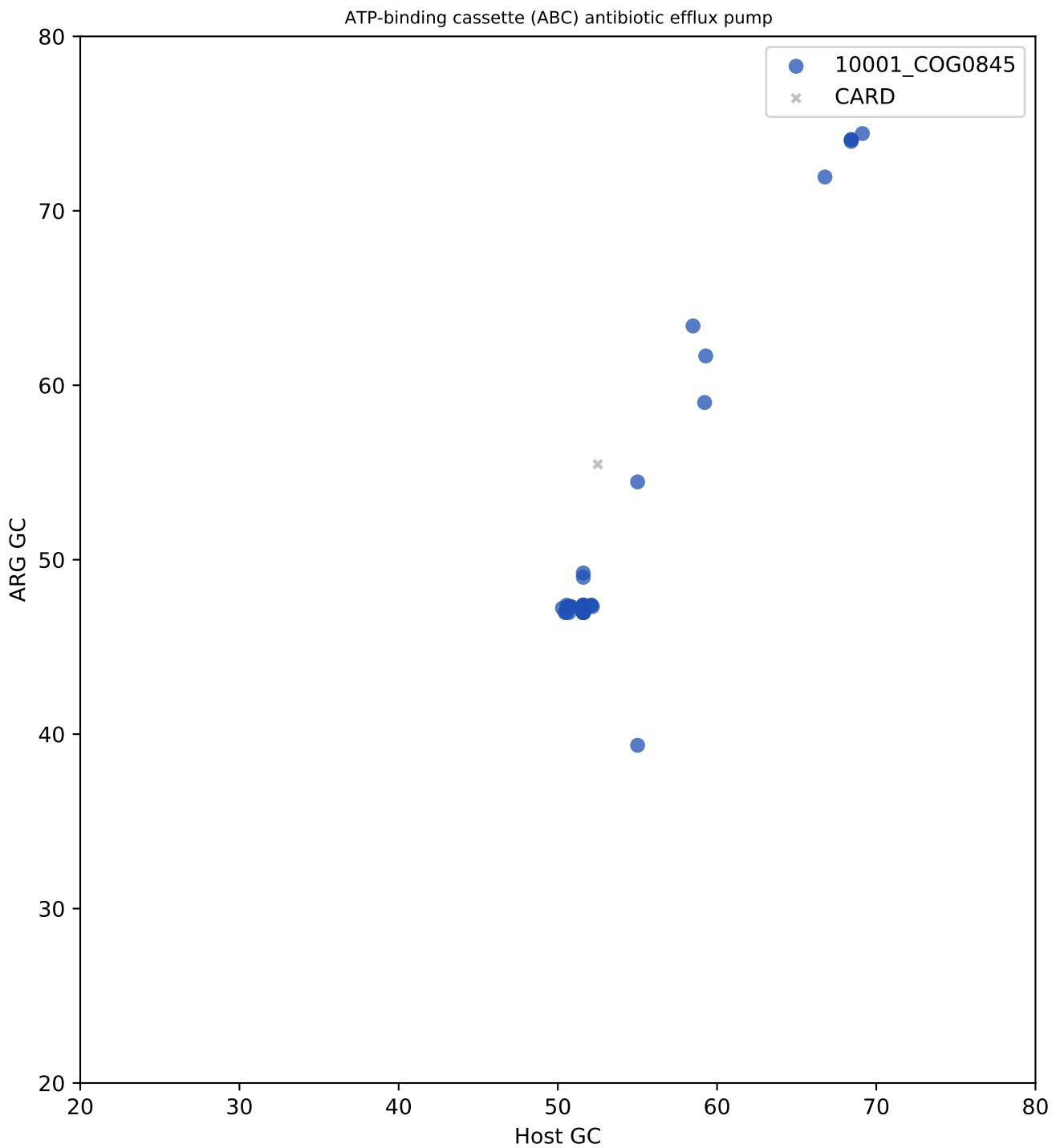


Supplementary Figure S1: Scatter plots depicting the correlation between the %GC content of ARG genes and that of their host chromosome for each ARO-COGs group. Experimentally-validated resistance genes annotated in CARD that map to each ARO-COG group are shown as grey crosses.

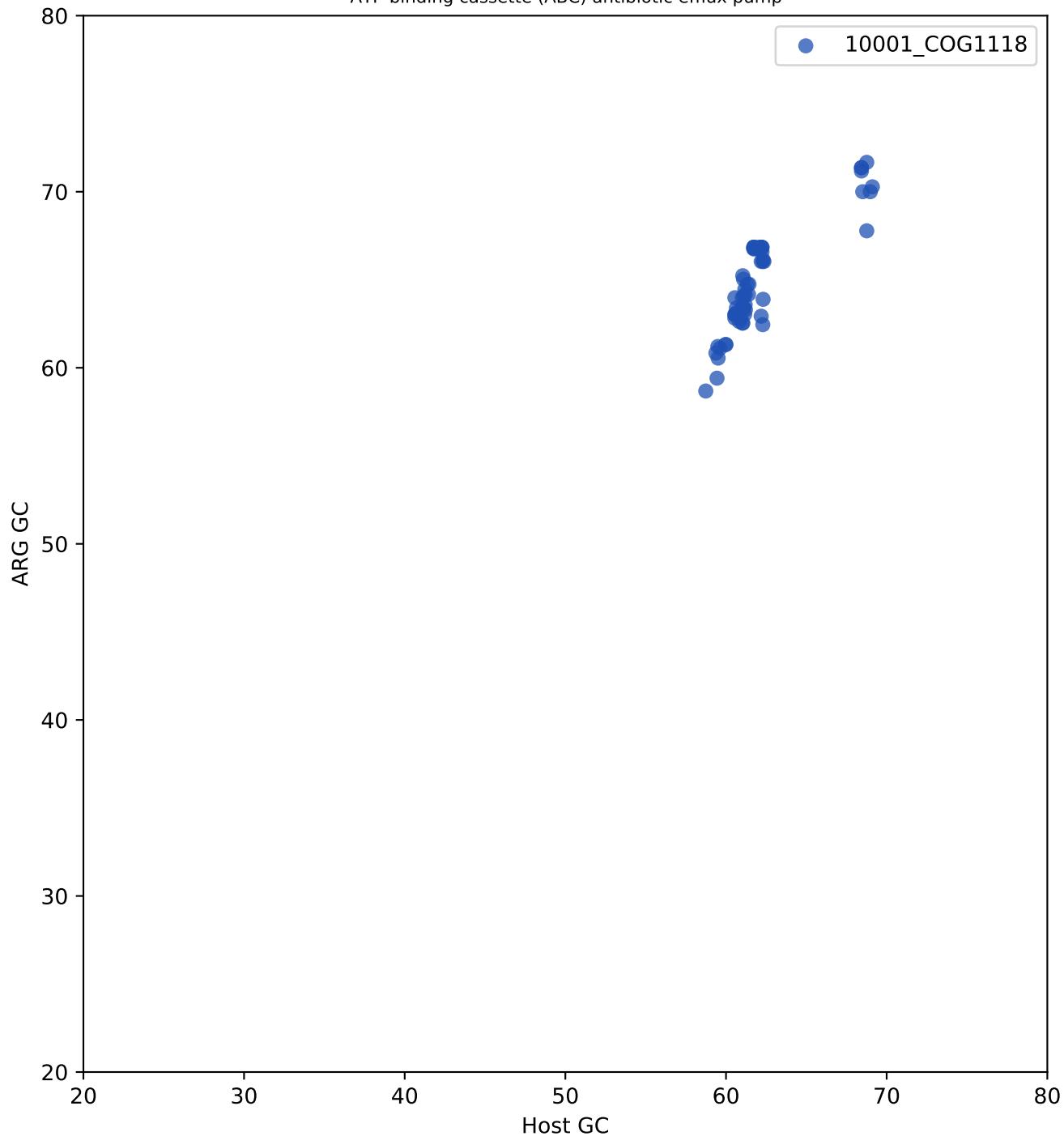


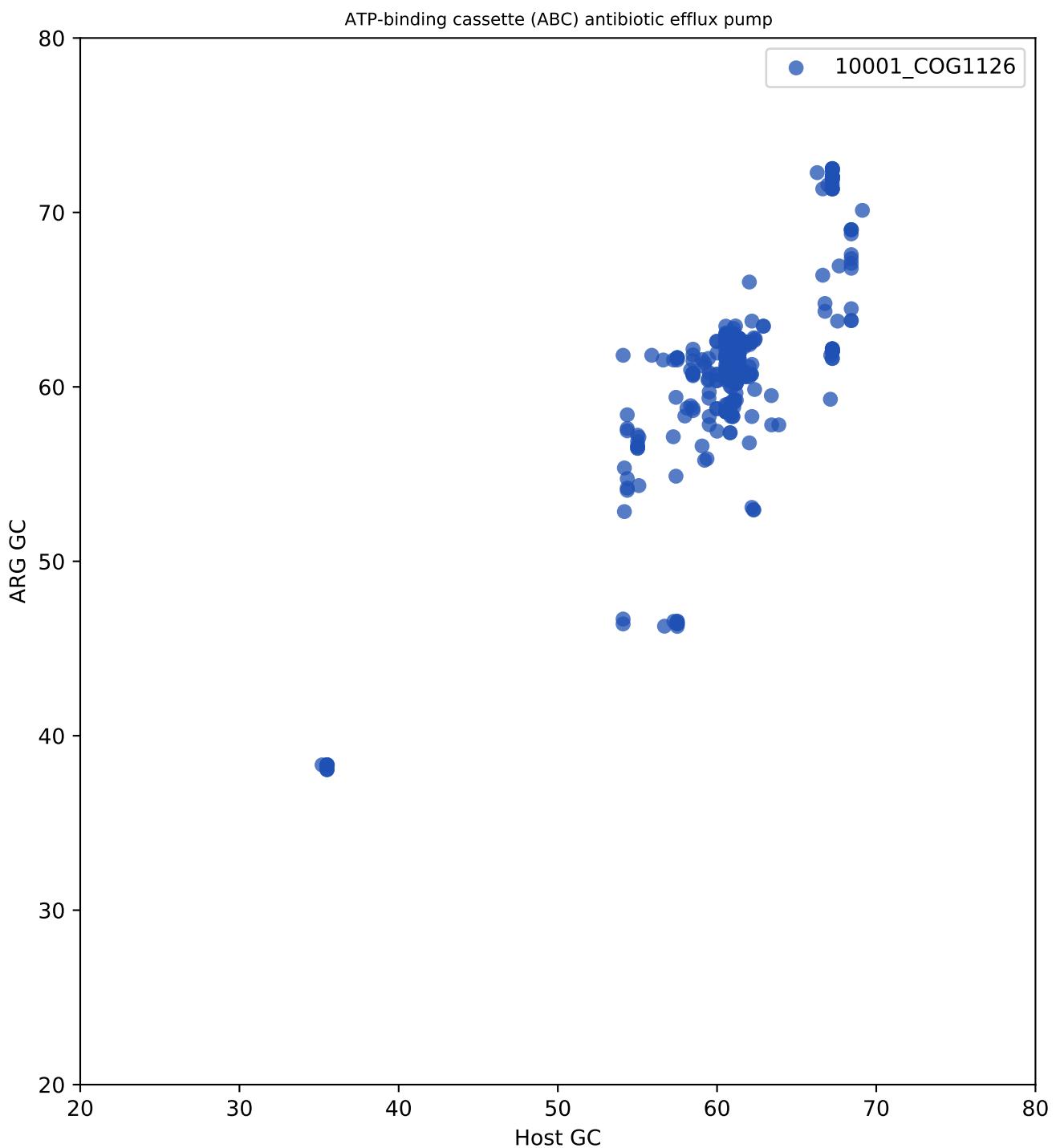
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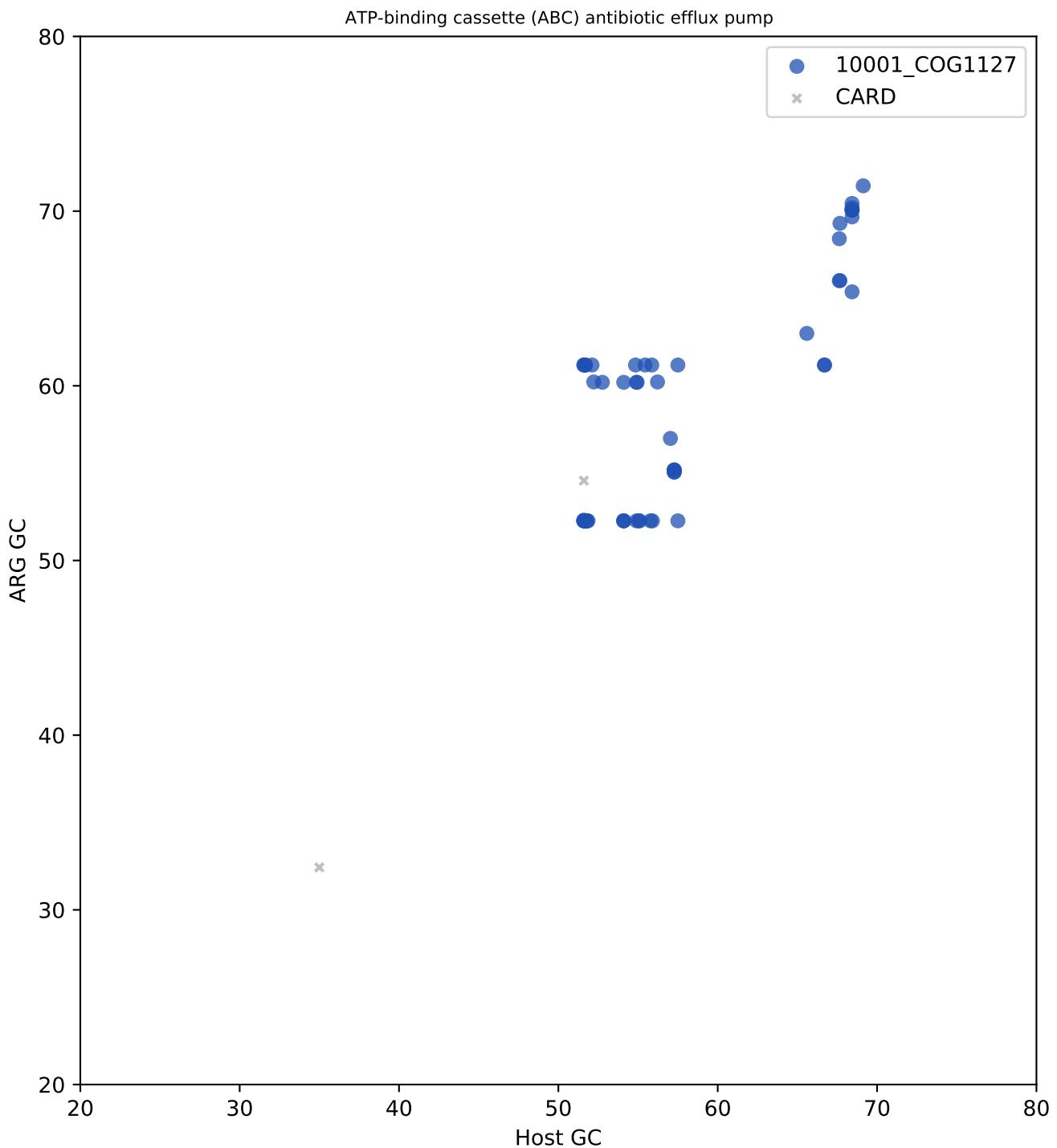
Supplementary Figure S1: (continued).

ATP-binding cassette (ABC) antibiotic efflux pump

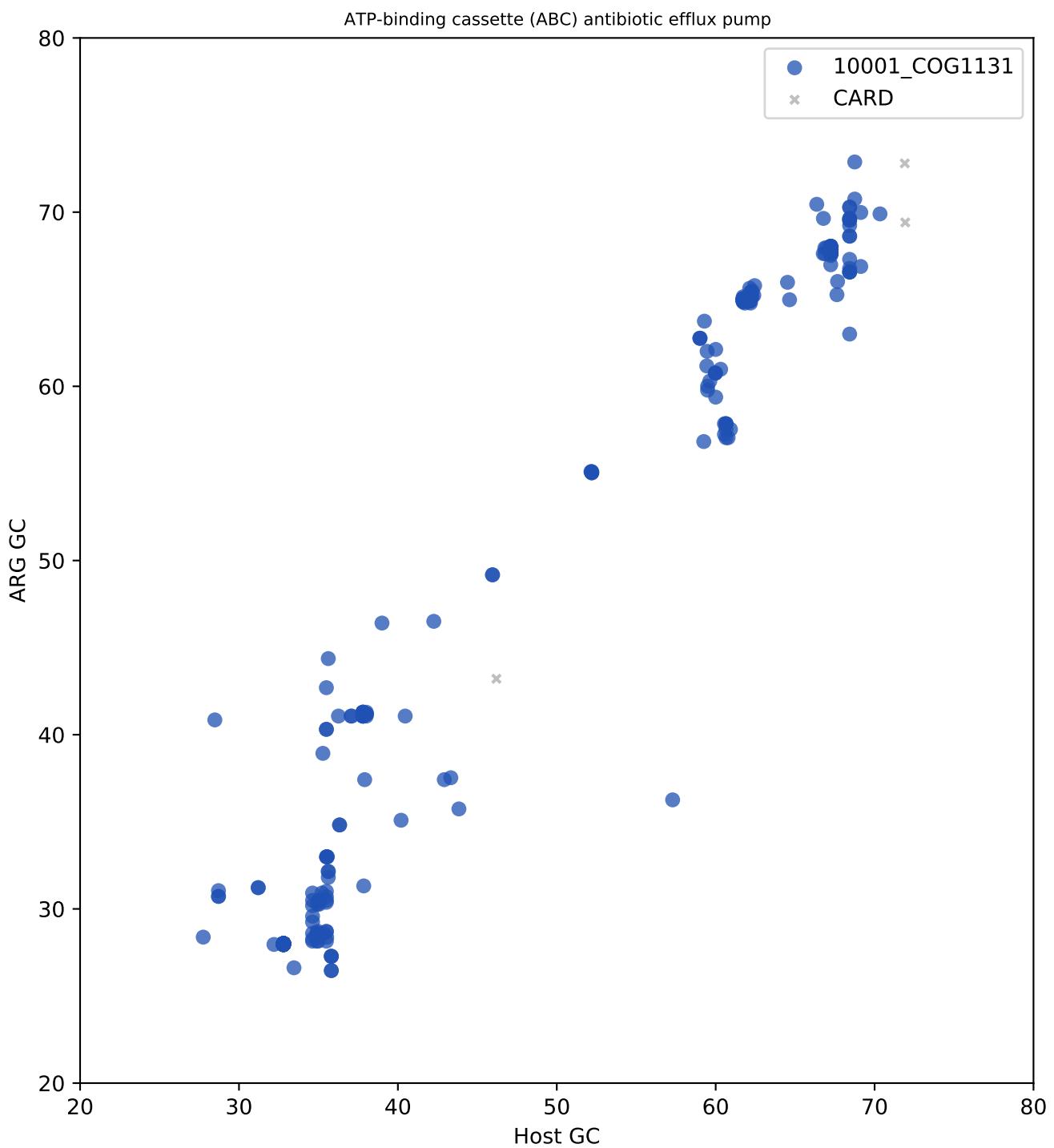




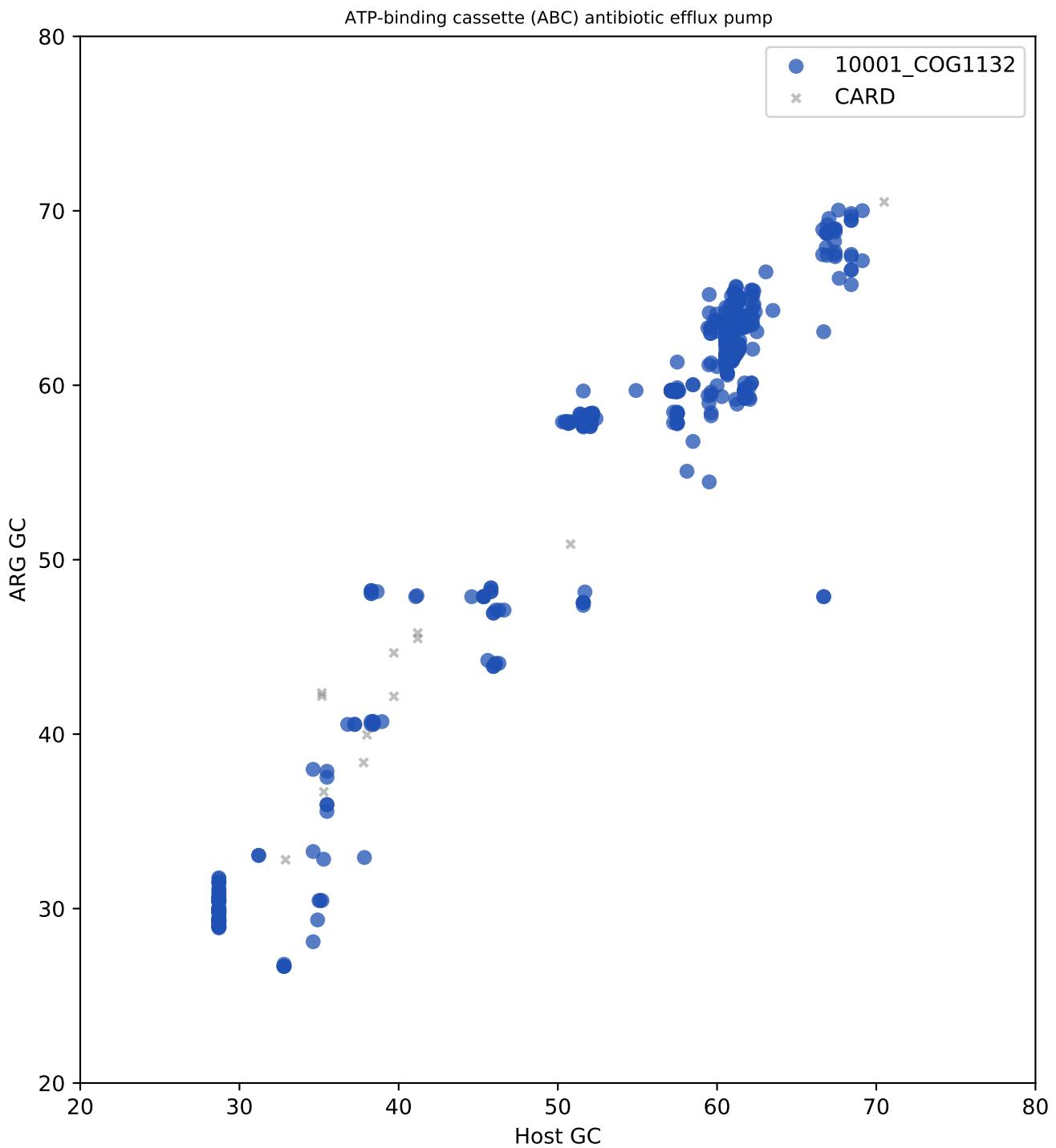
Supplementary Figure S1: (continued).



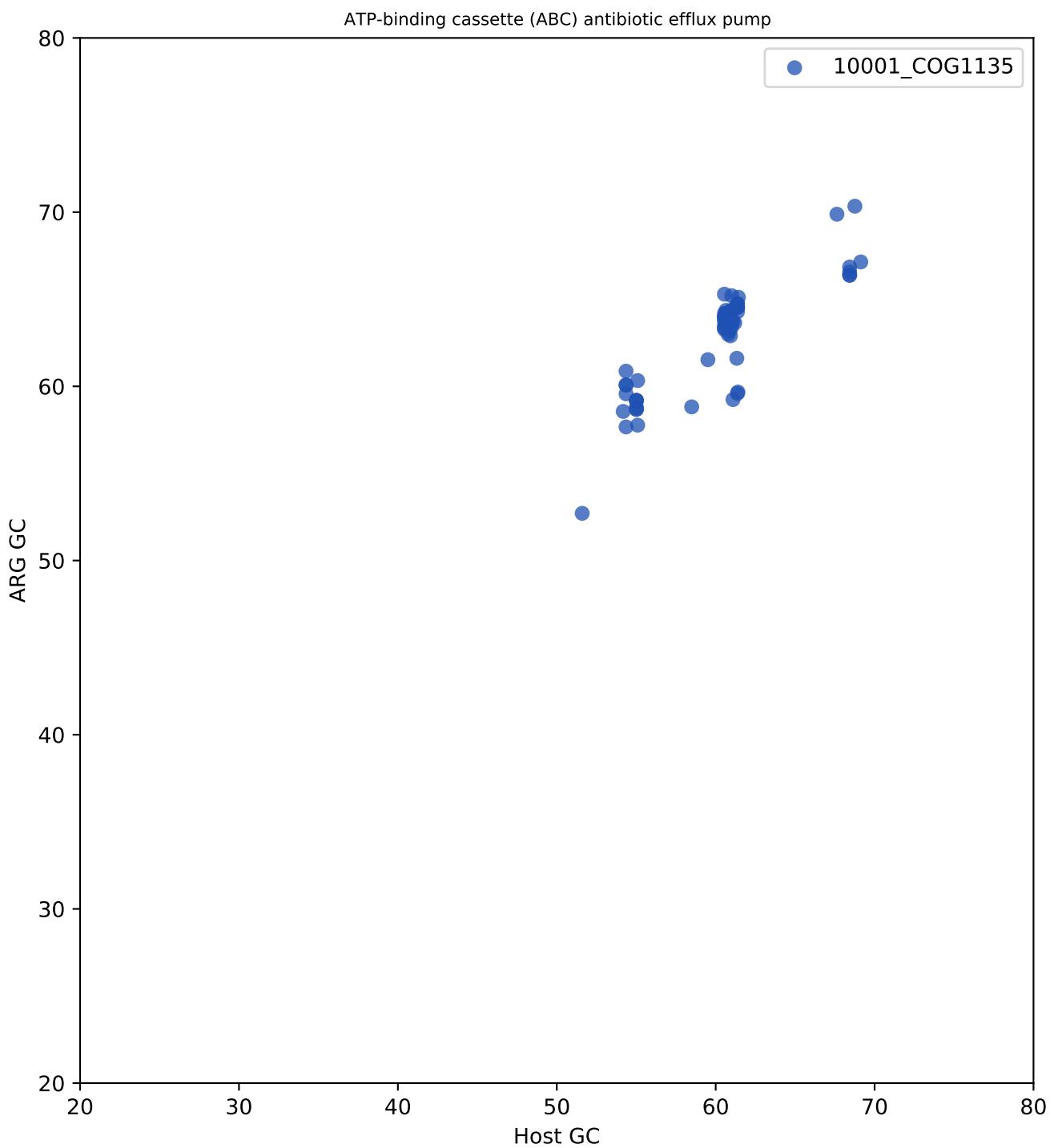
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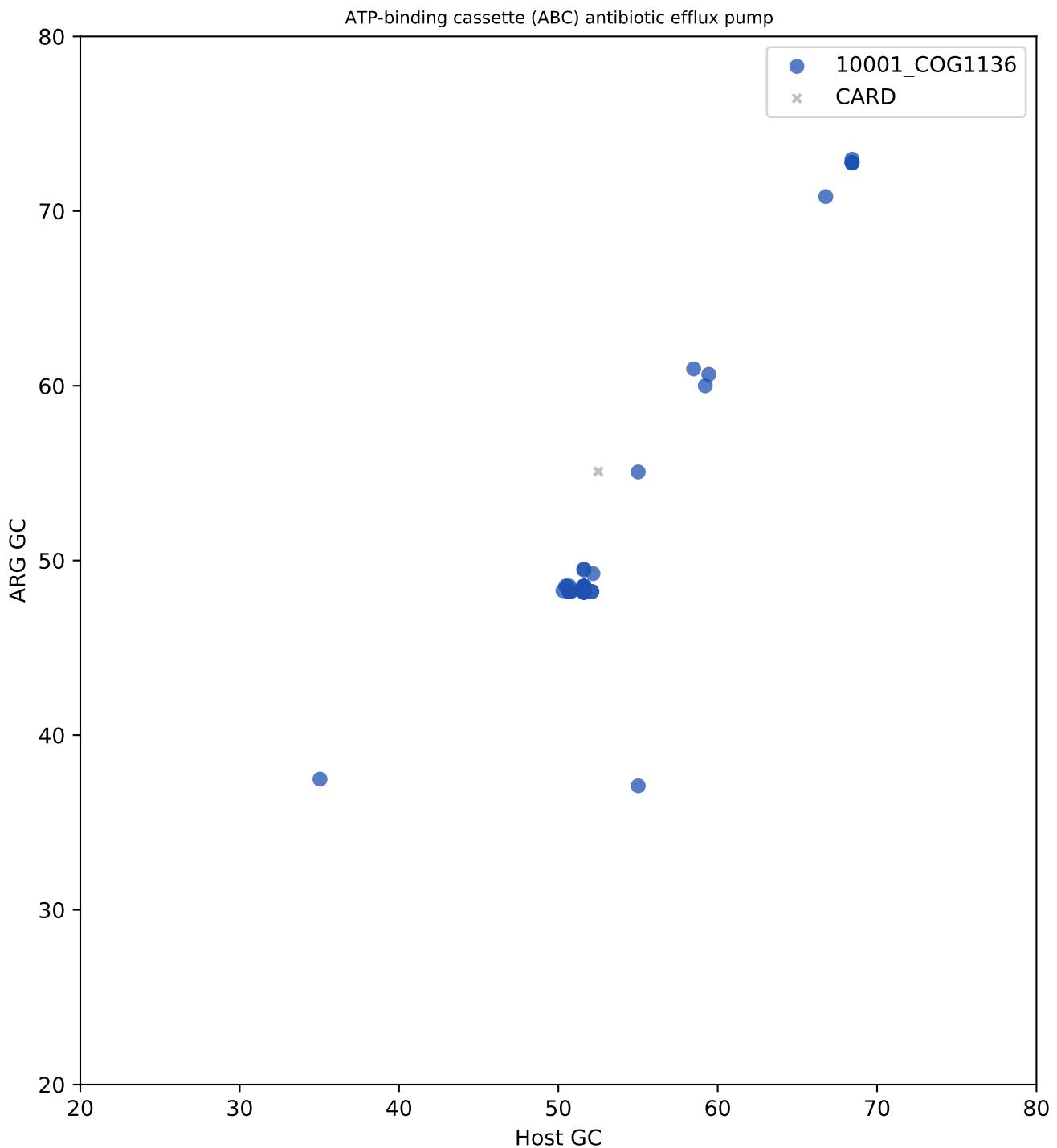
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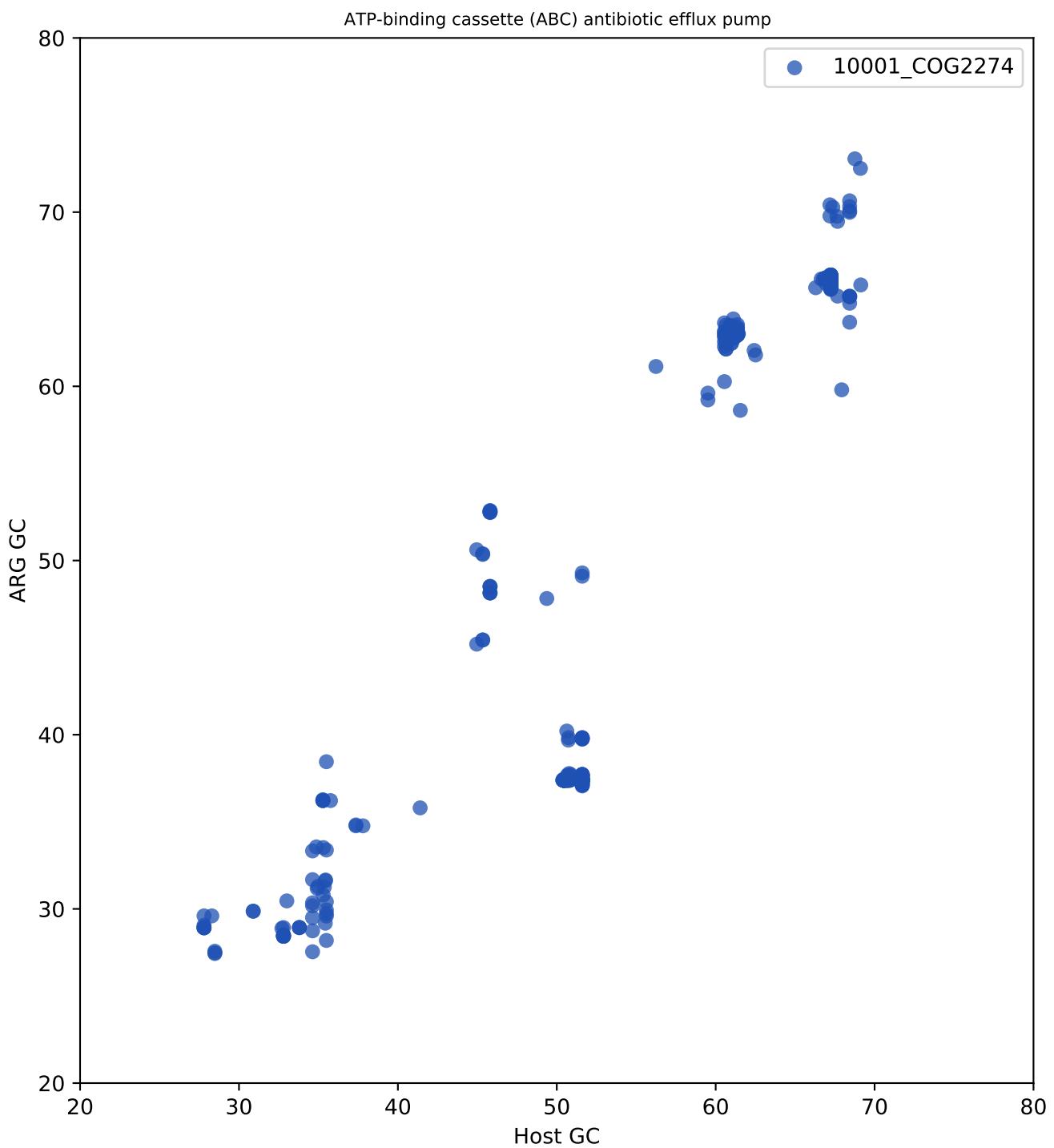
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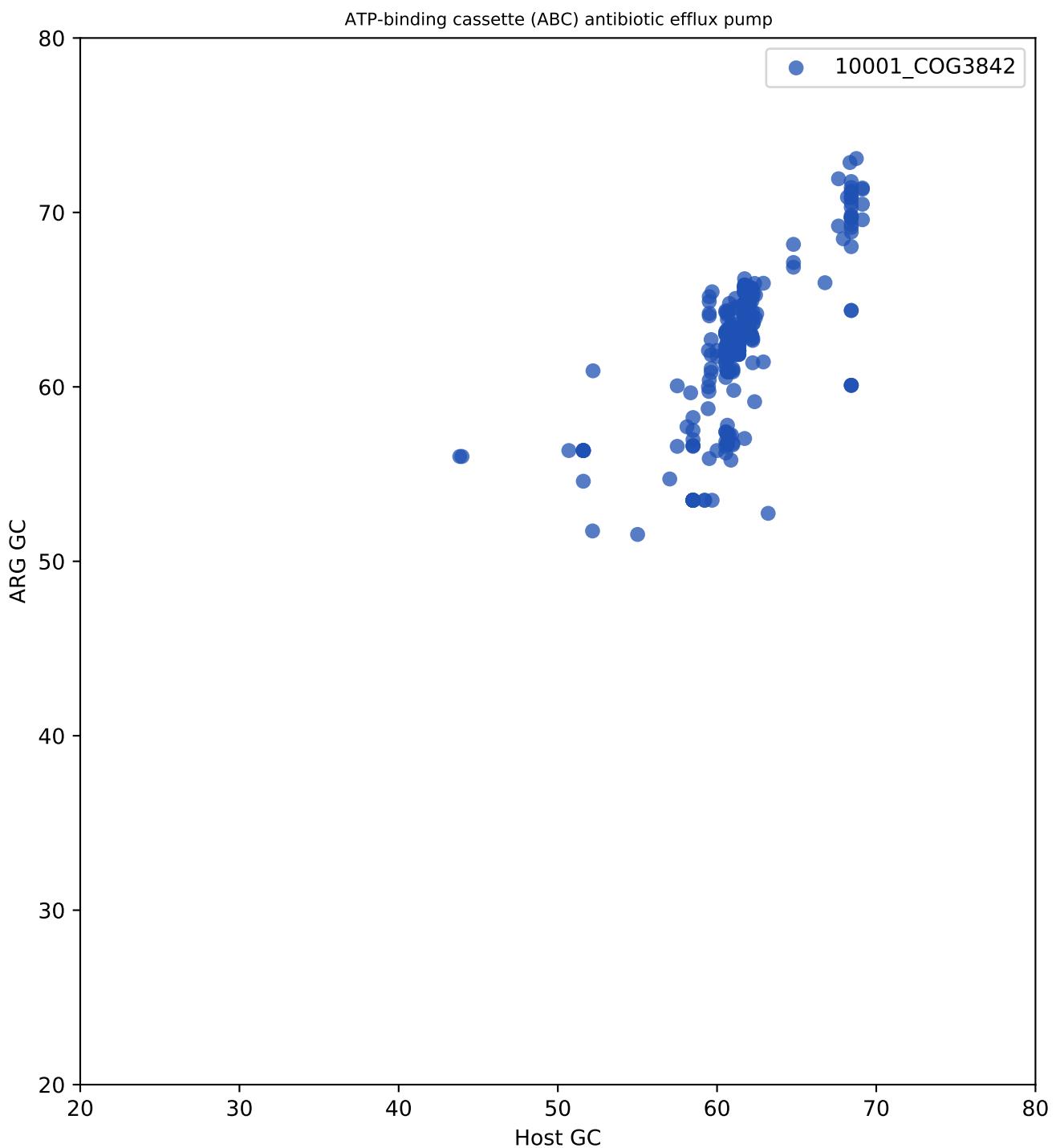
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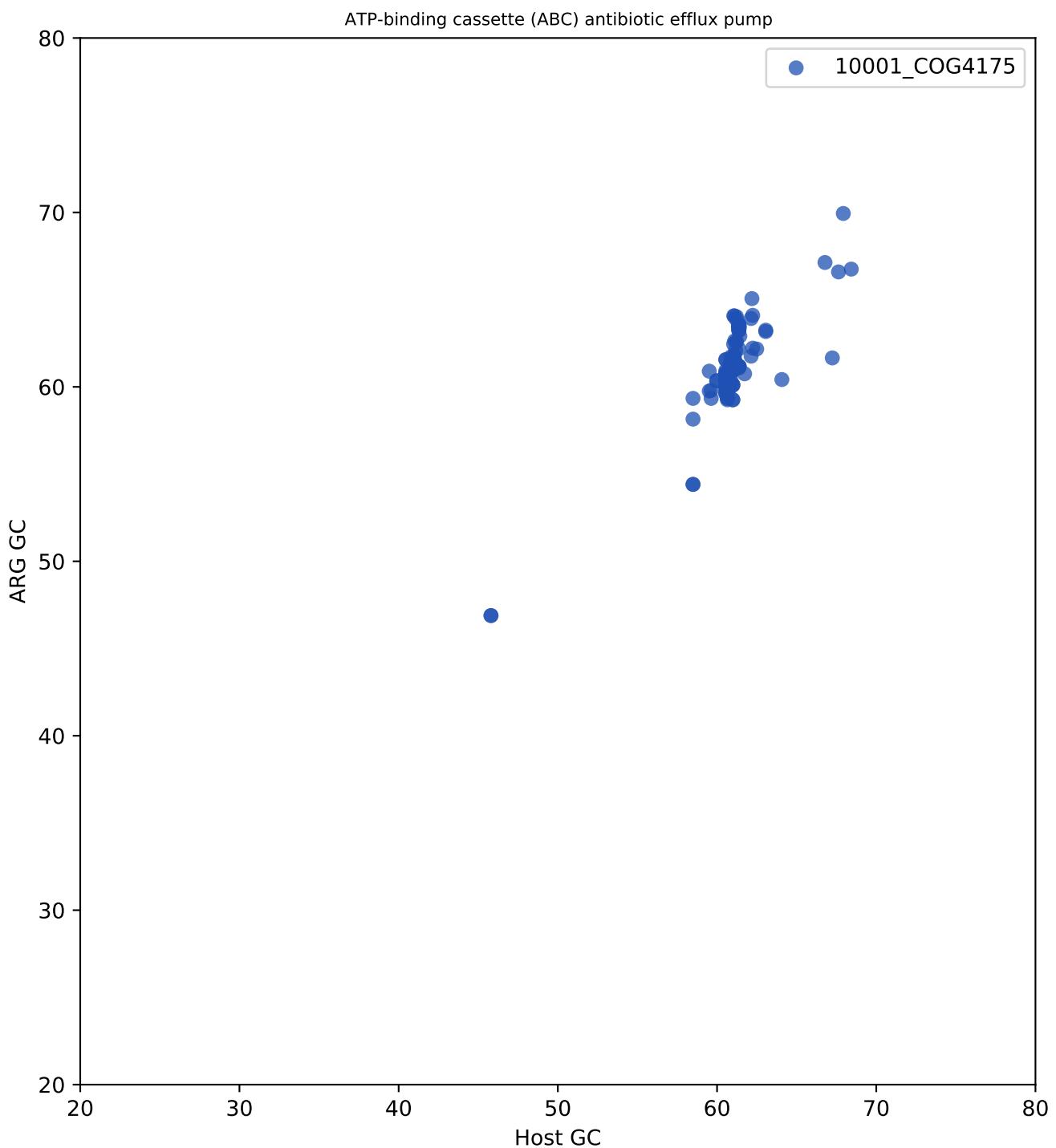
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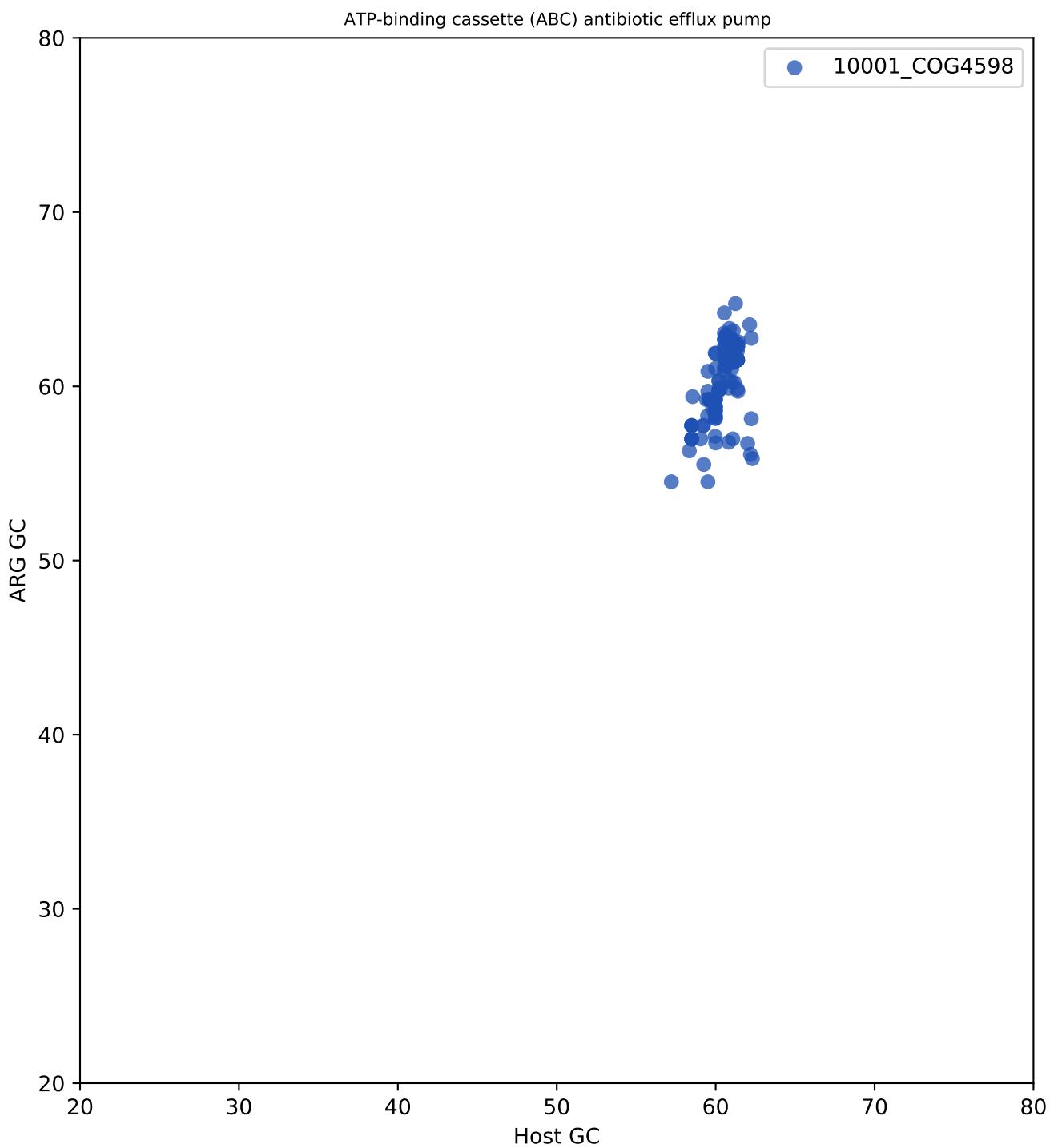
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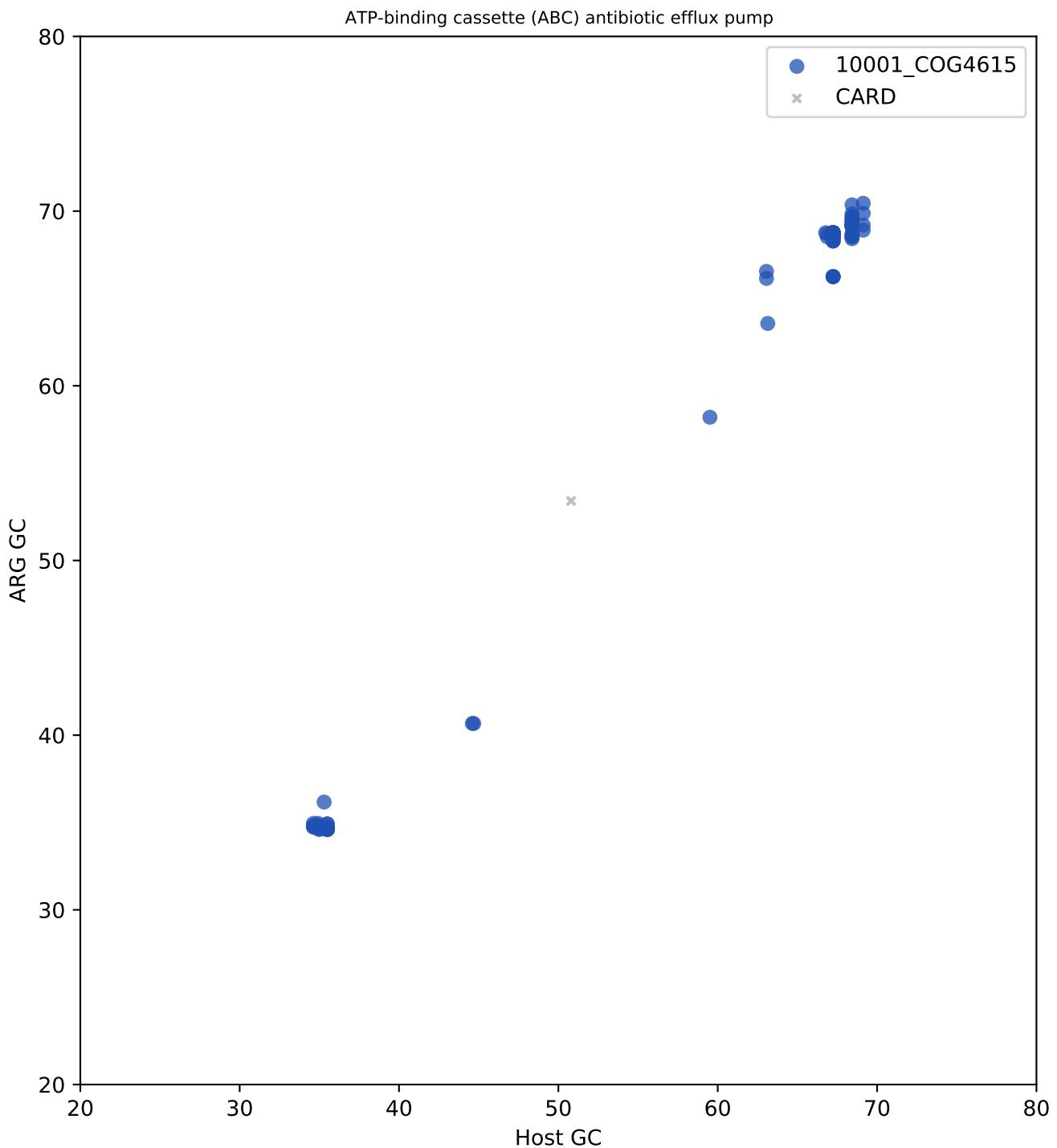
Supplementary Figure S1: (continued).



Supplementary Figure S1: (continued).

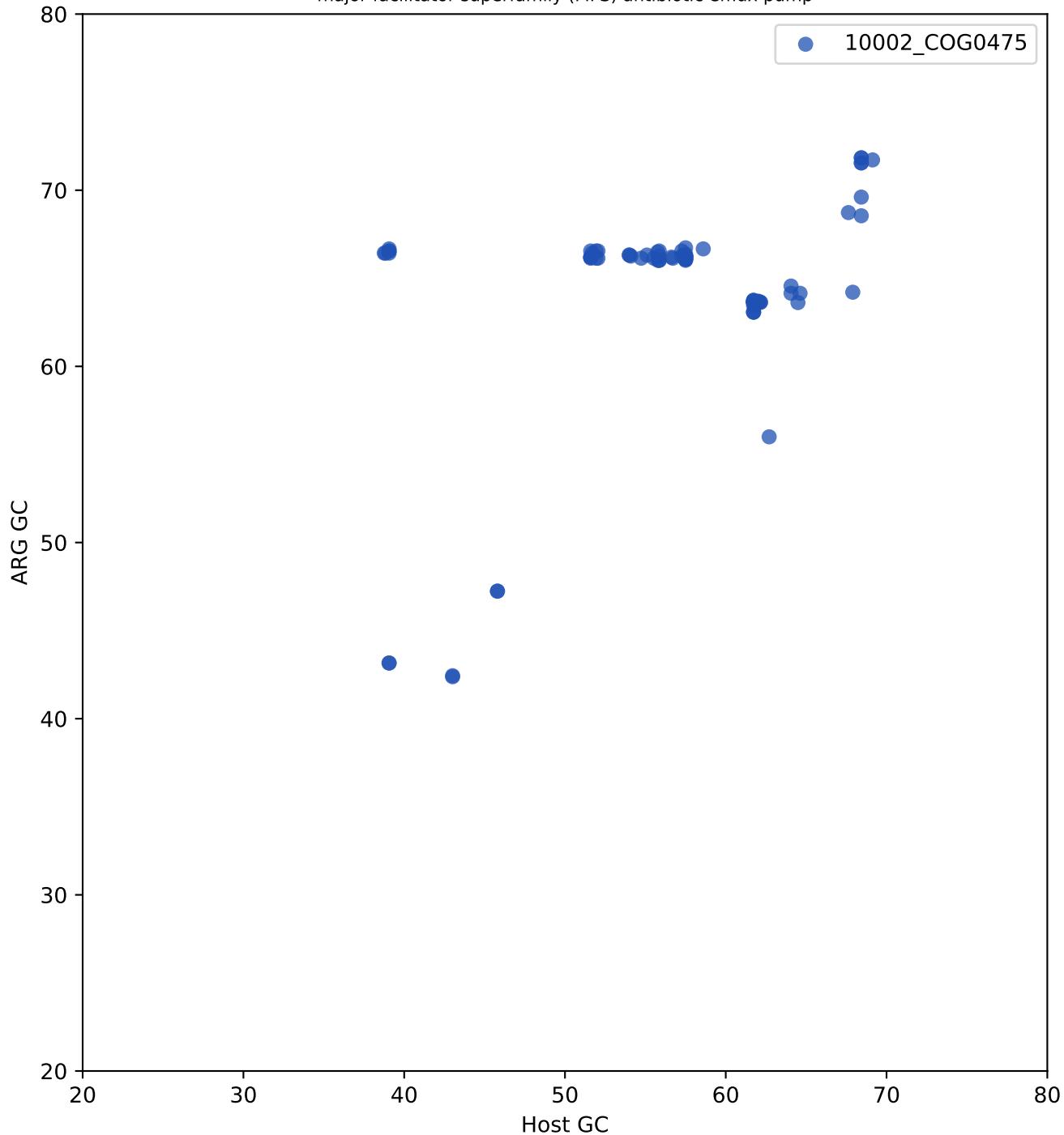


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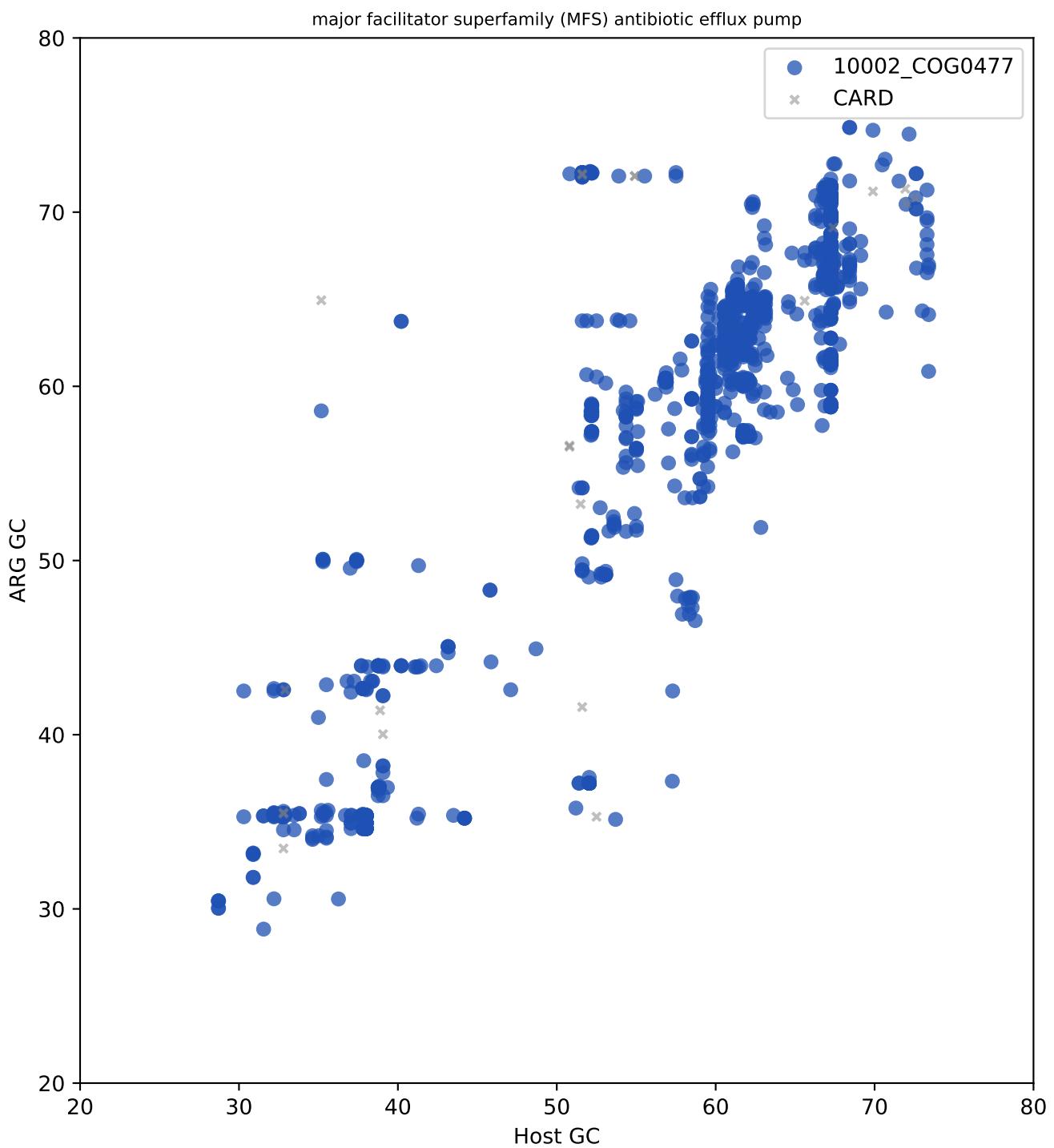


Supplementary Figure S1: (continued).

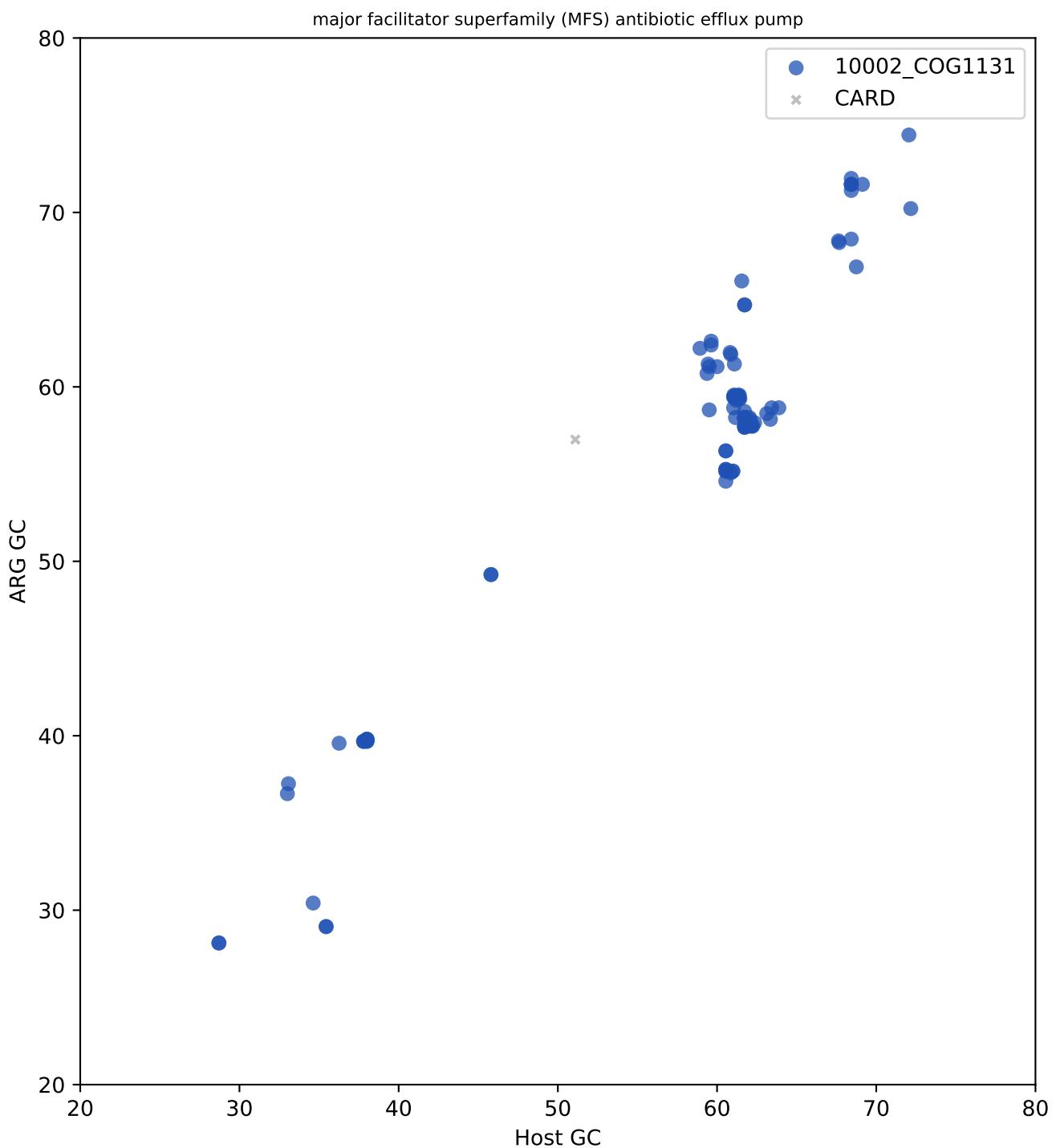
major facilitator superfamily (MFS) antibiotic efflux pump



Supplementary Figure S1: (continued).

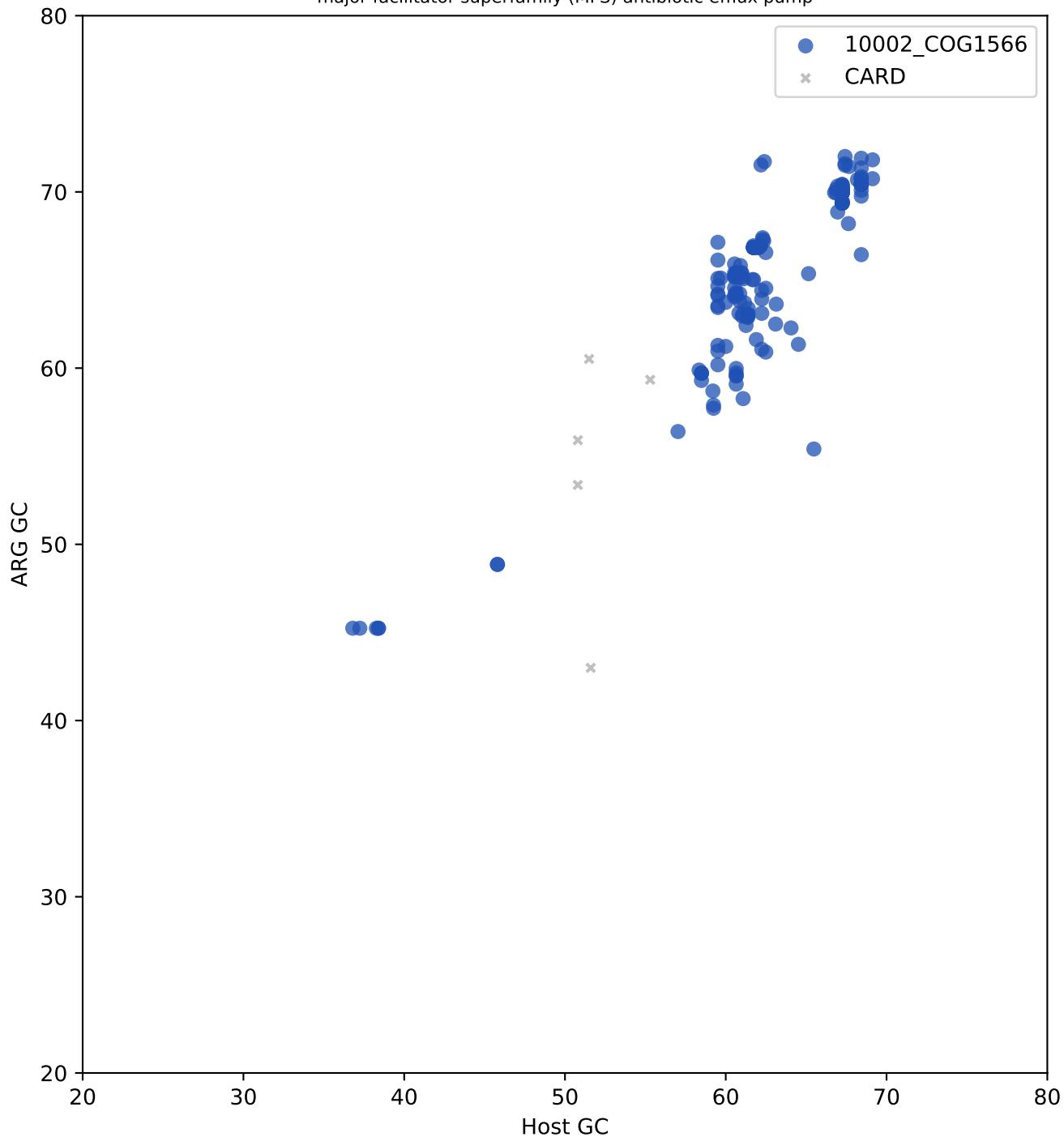


Supplementary Figure S1: (continued).

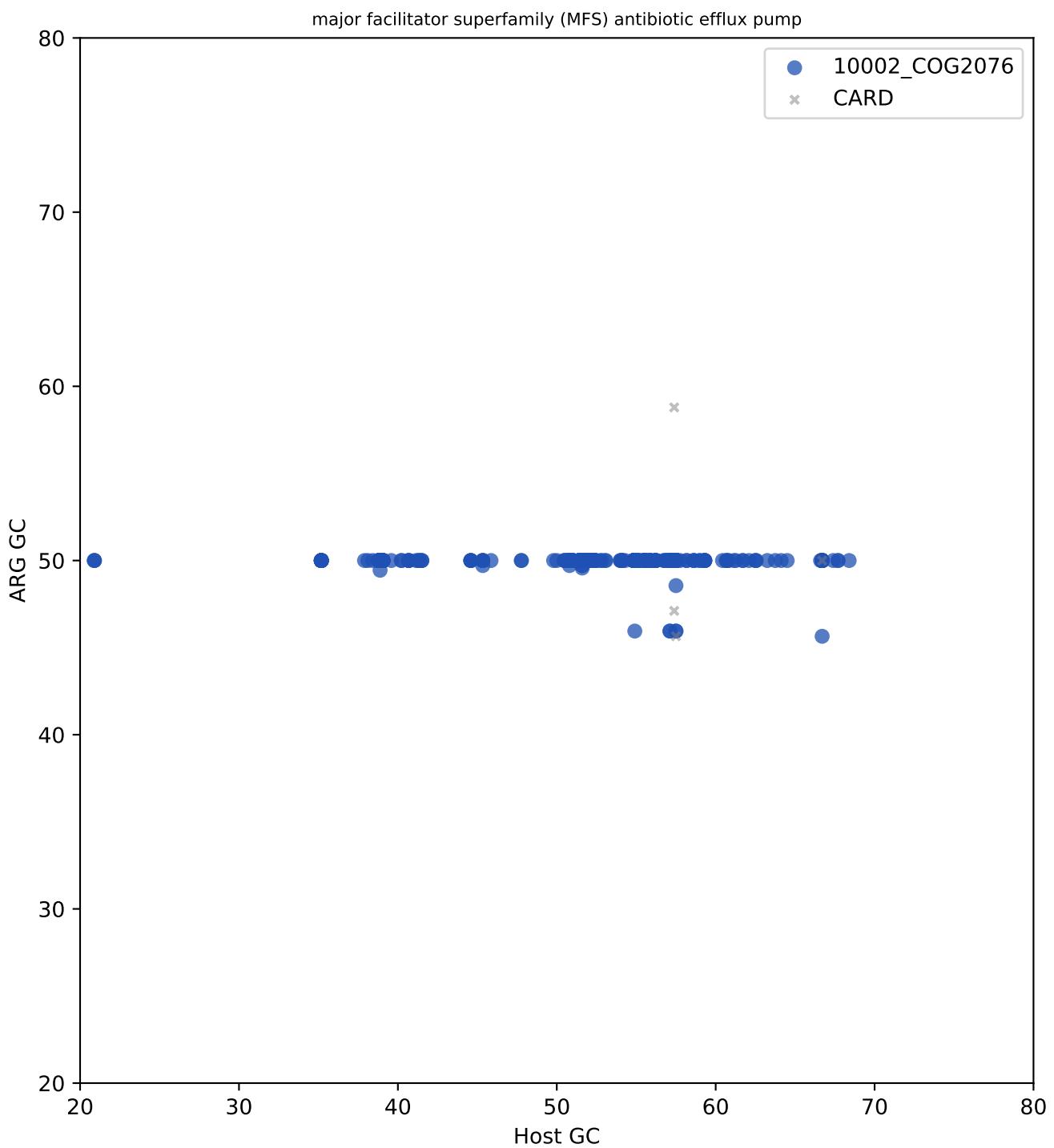


Supplementary Figure S1: (continued).

major facilitator superfamily (MFS) antibiotic efflux pump

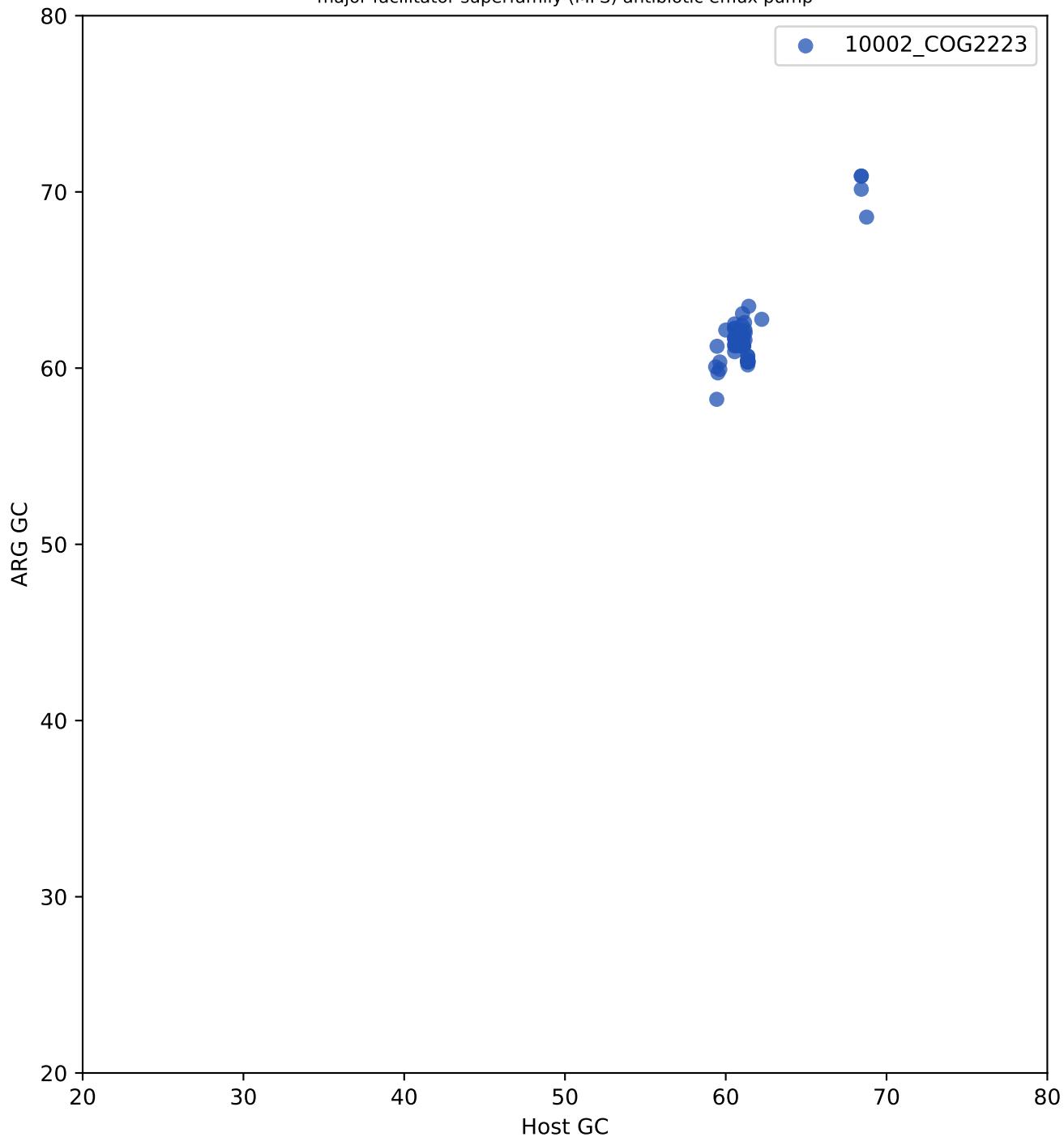


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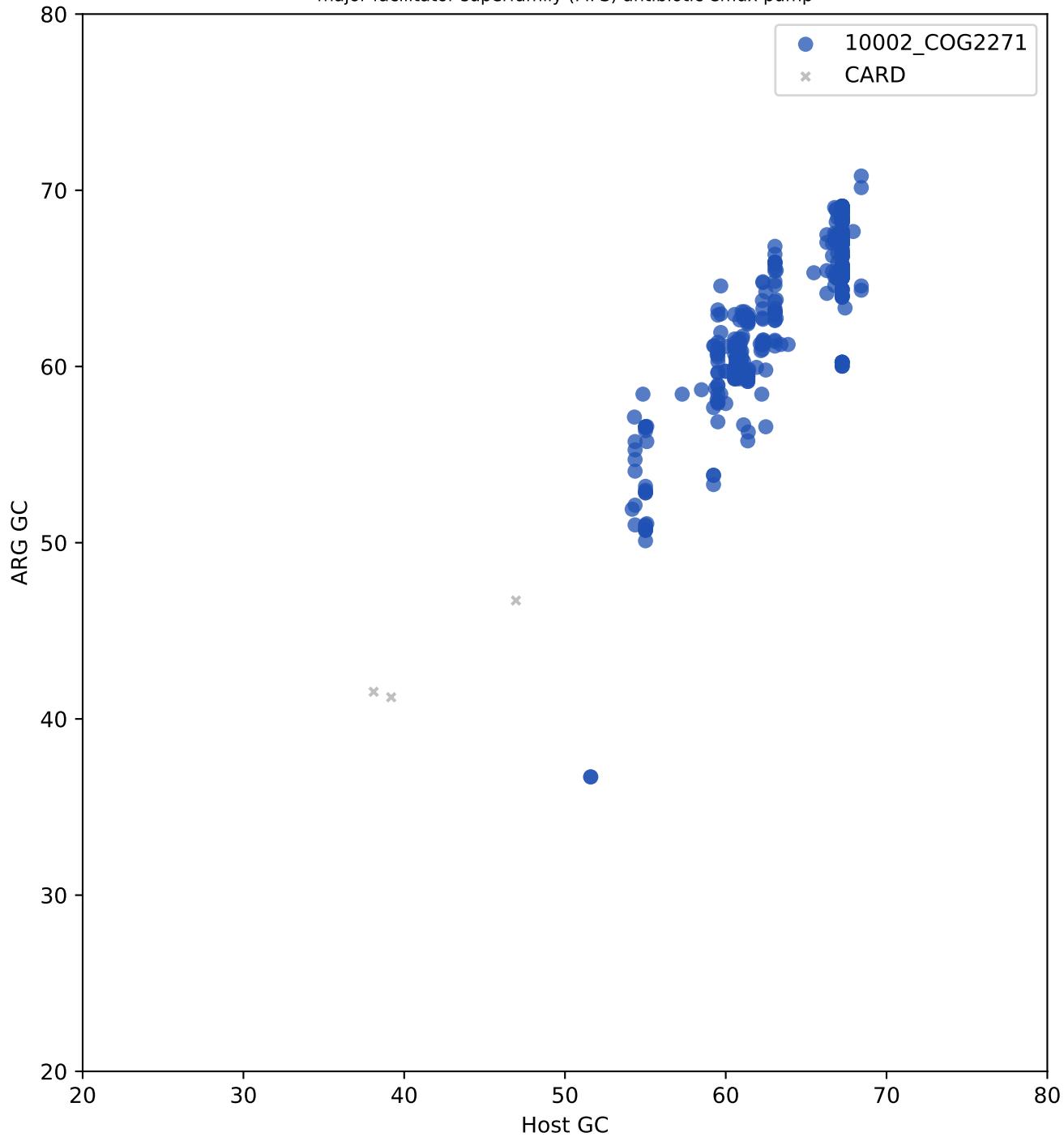
Supplementary Figure S1: (continued).

major facilitator superfamily (MFS) antibiotic efflux pump

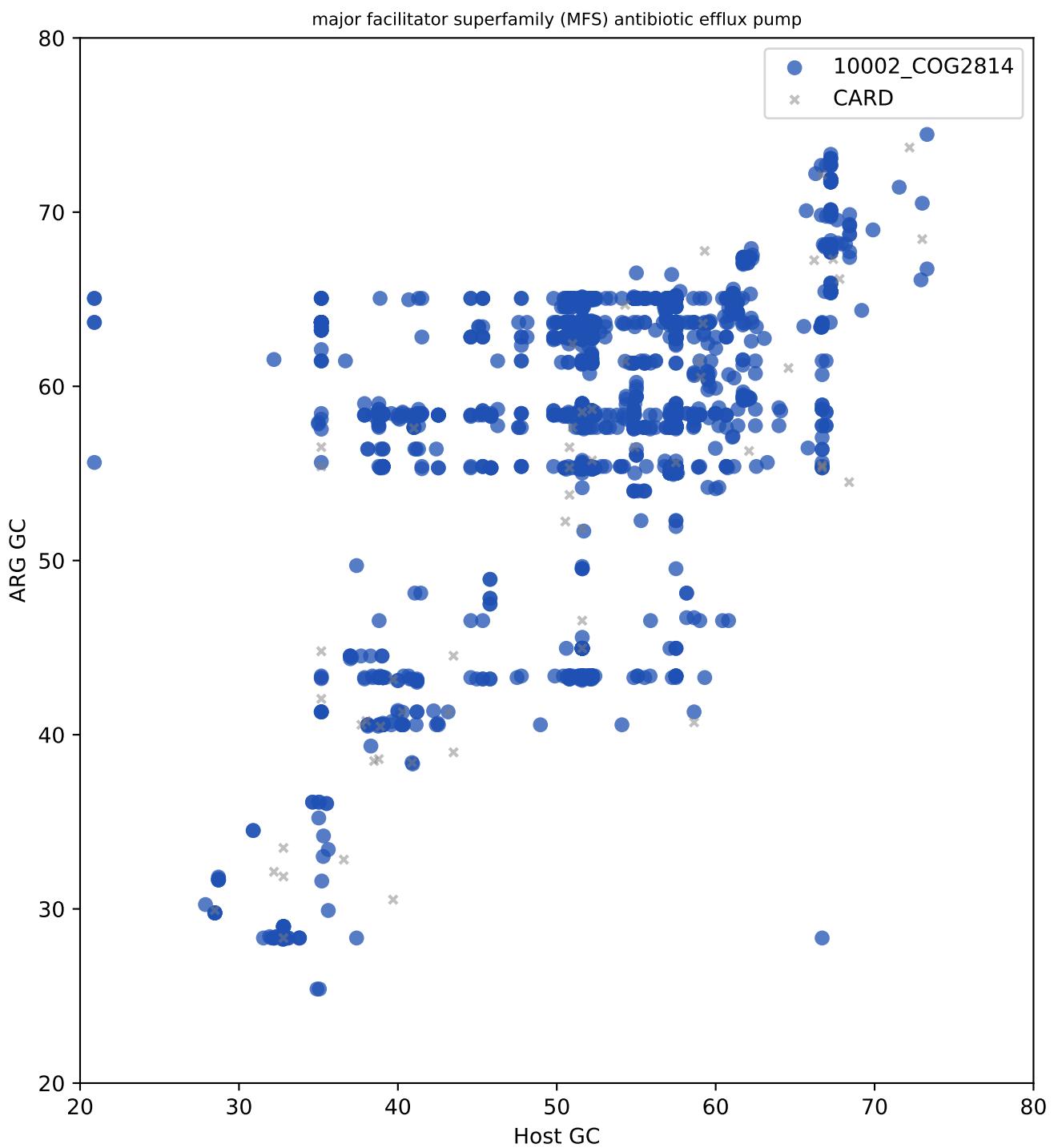


Supplementary Figure S1: (continued).

major facilitator superfamily (MFS) antibiotic efflux pump

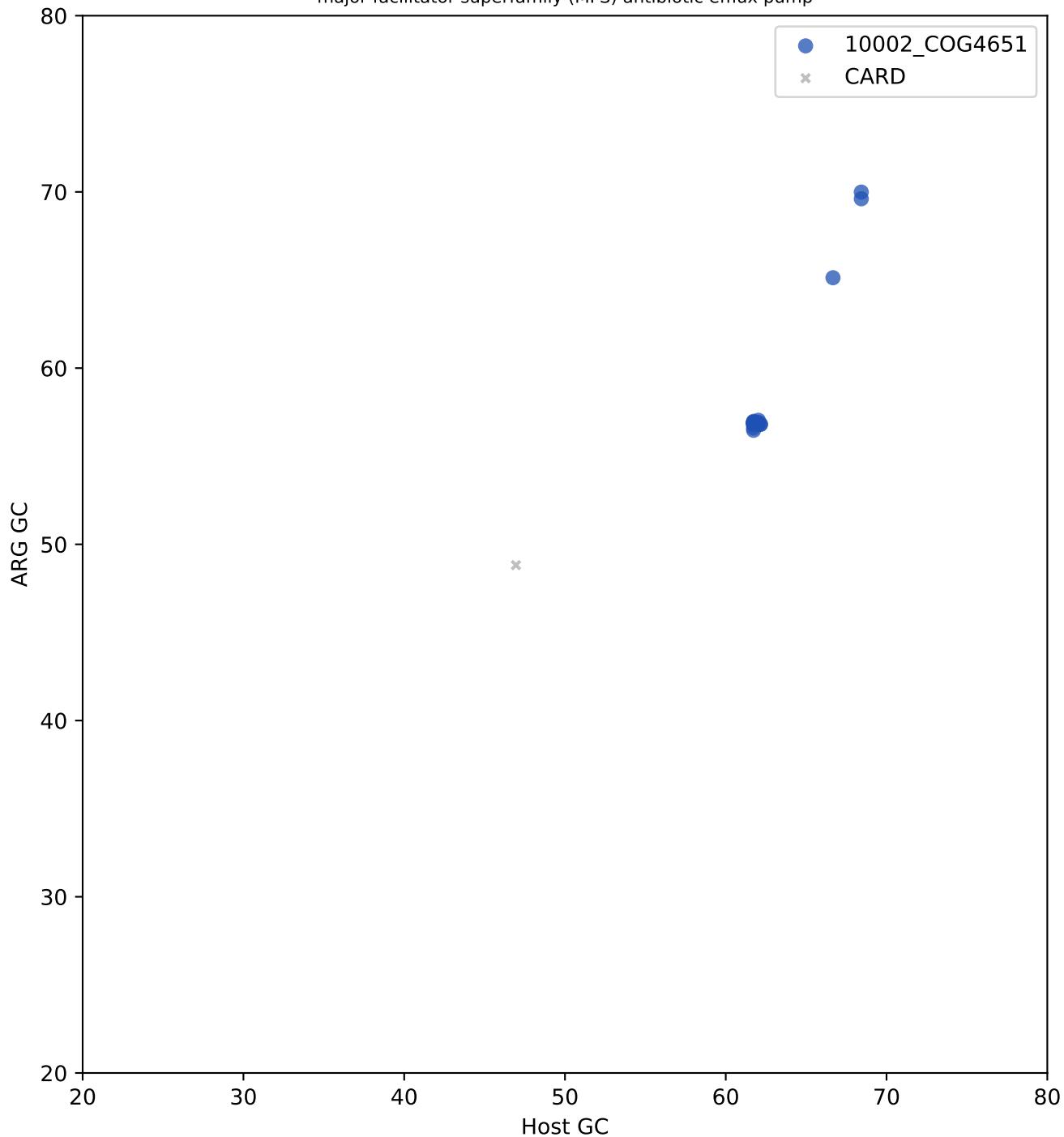


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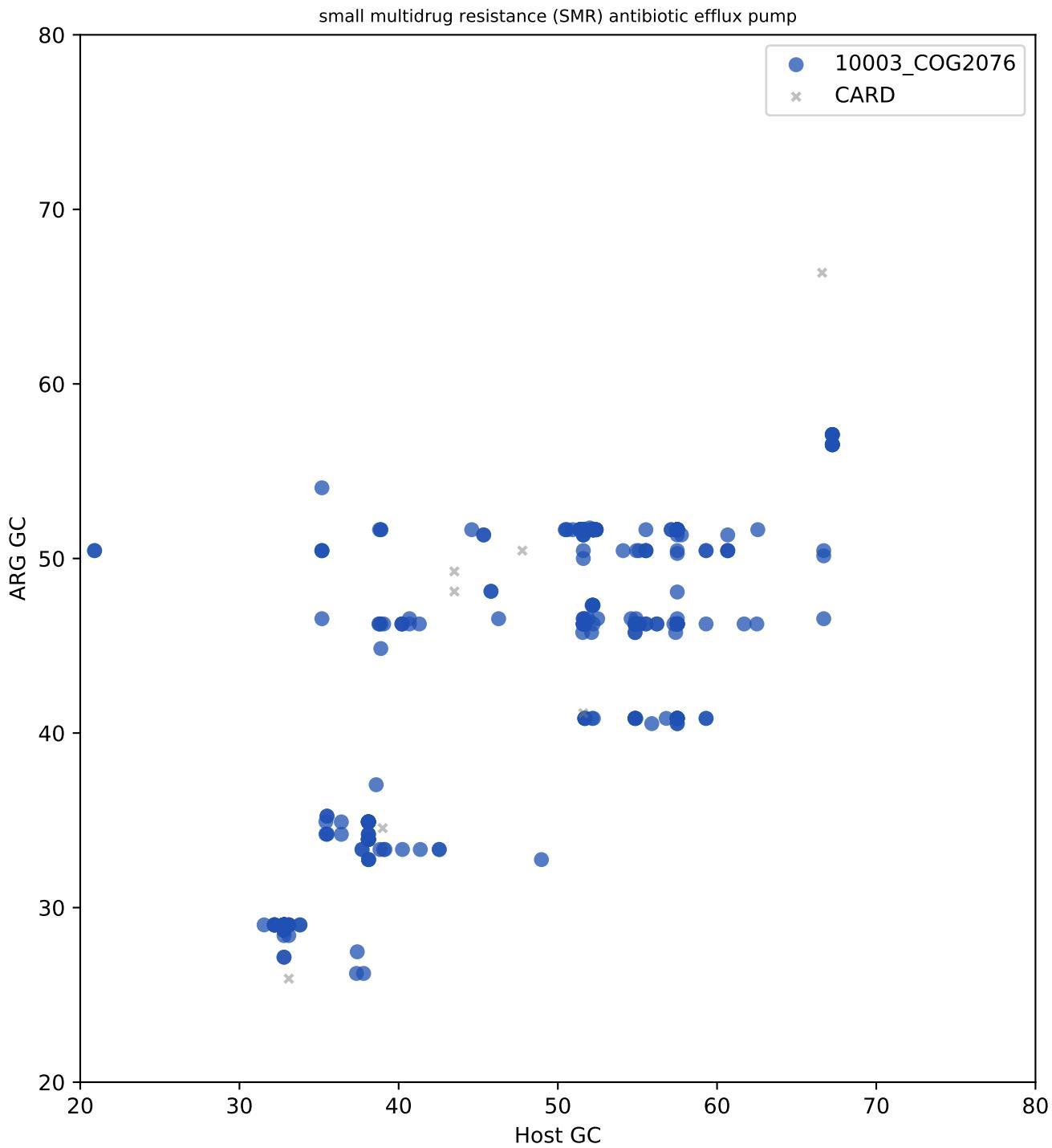


Supplementary Figure S1: (continued).

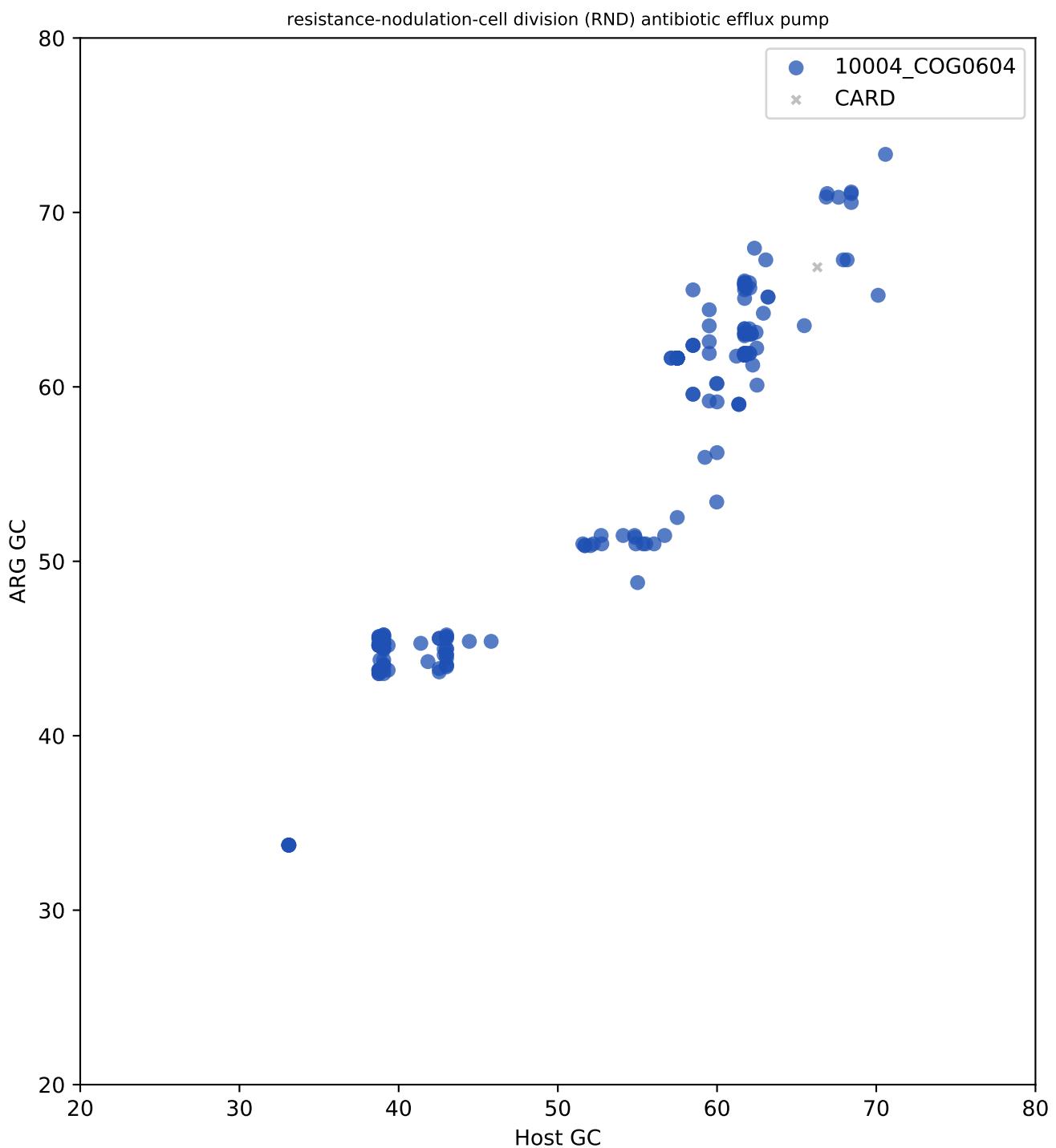
major facilitator superfamily (MFS) antibiotic efflux pump



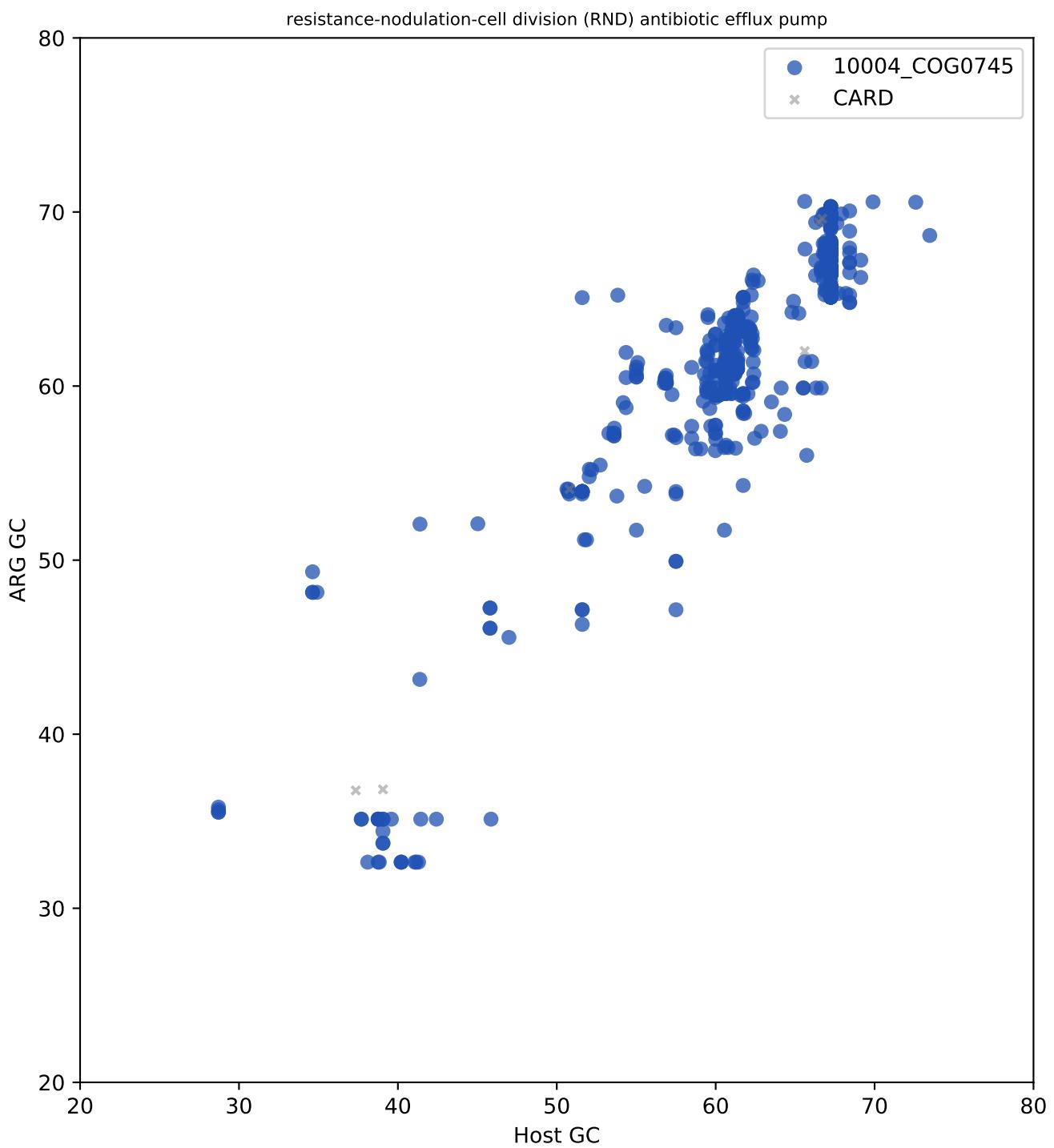
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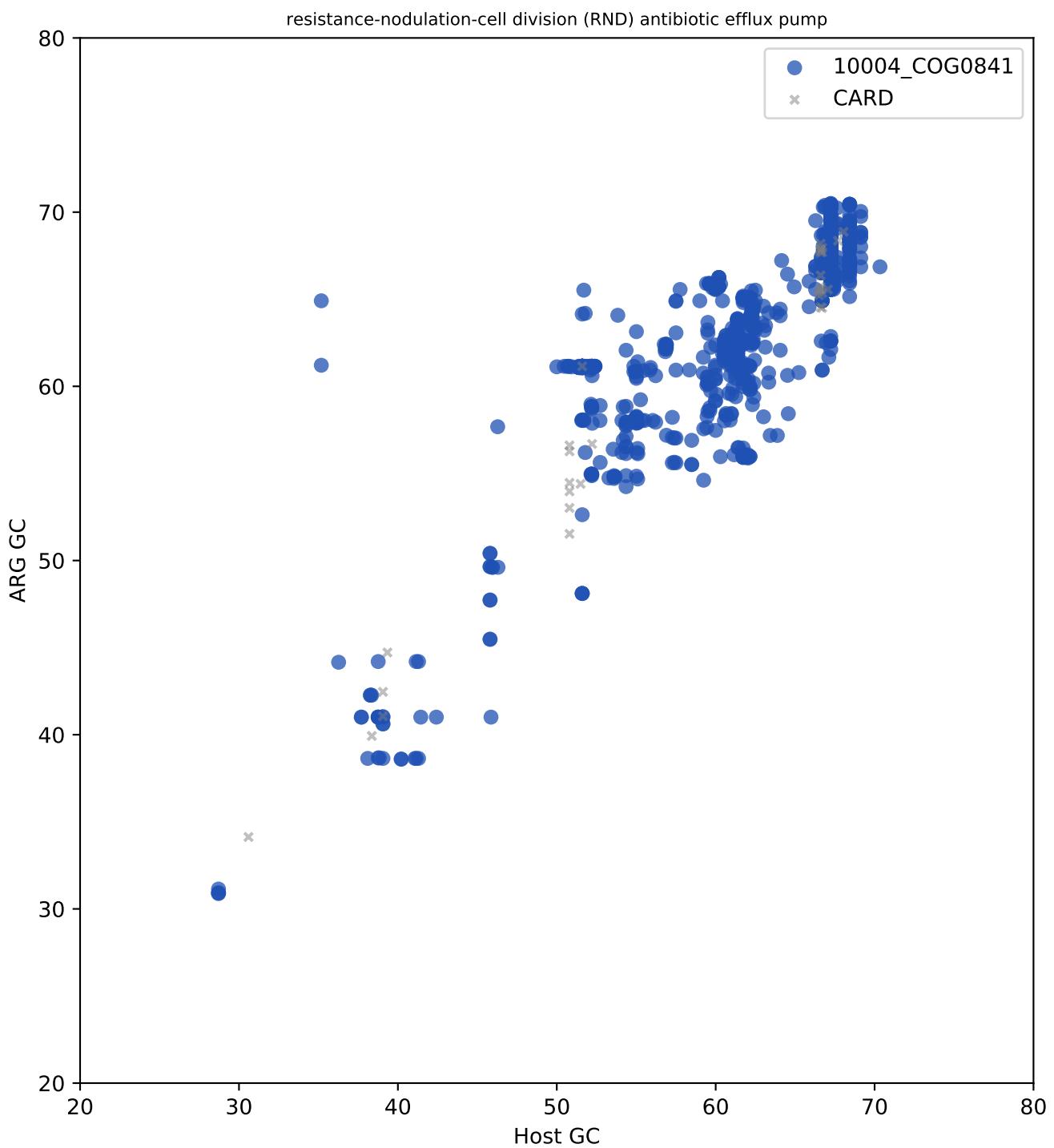
Supplementary Figure S1: (continued).



Supplementary Figure S1: (continued).

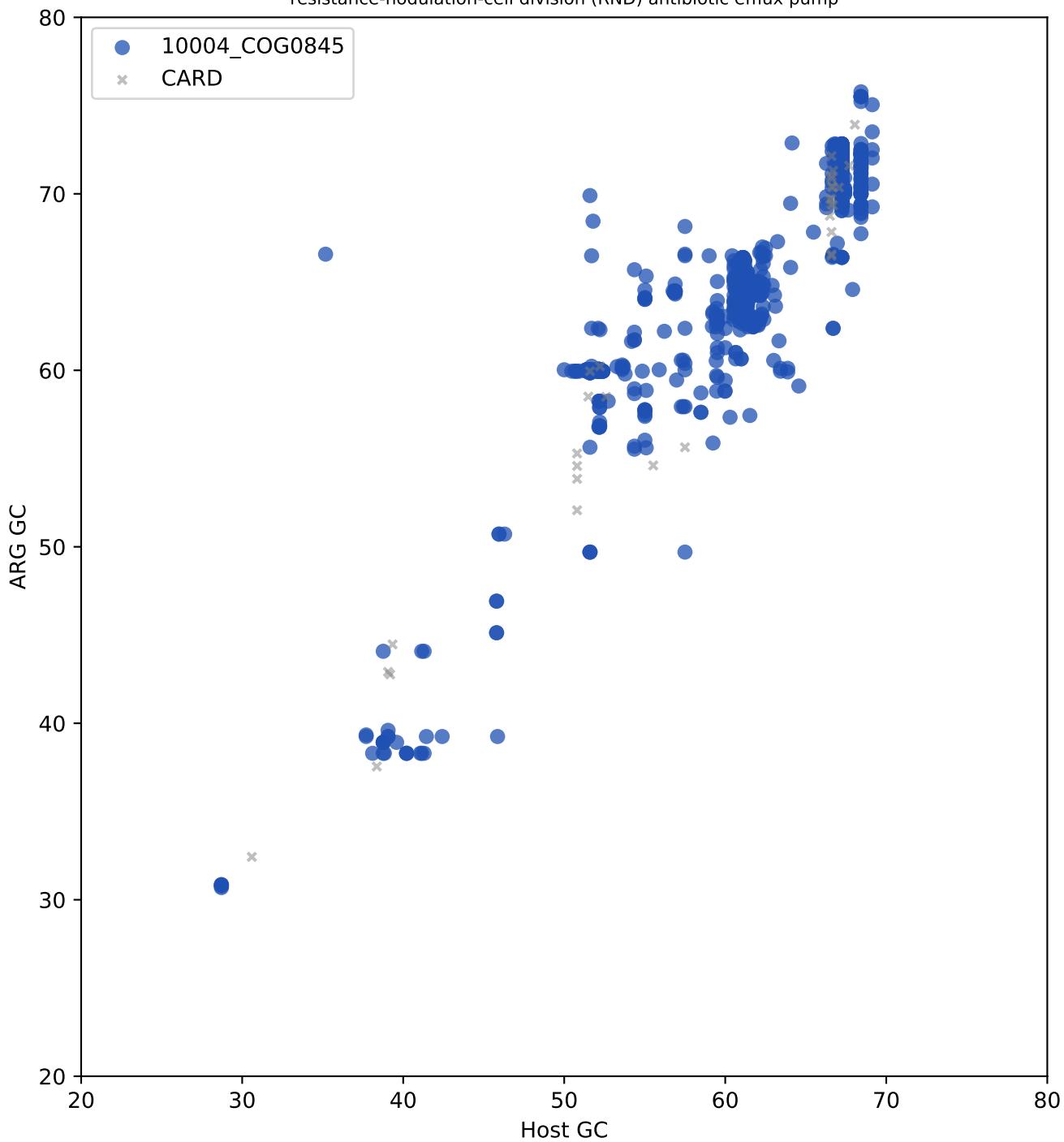


Supplementary Figure S1: (continued).

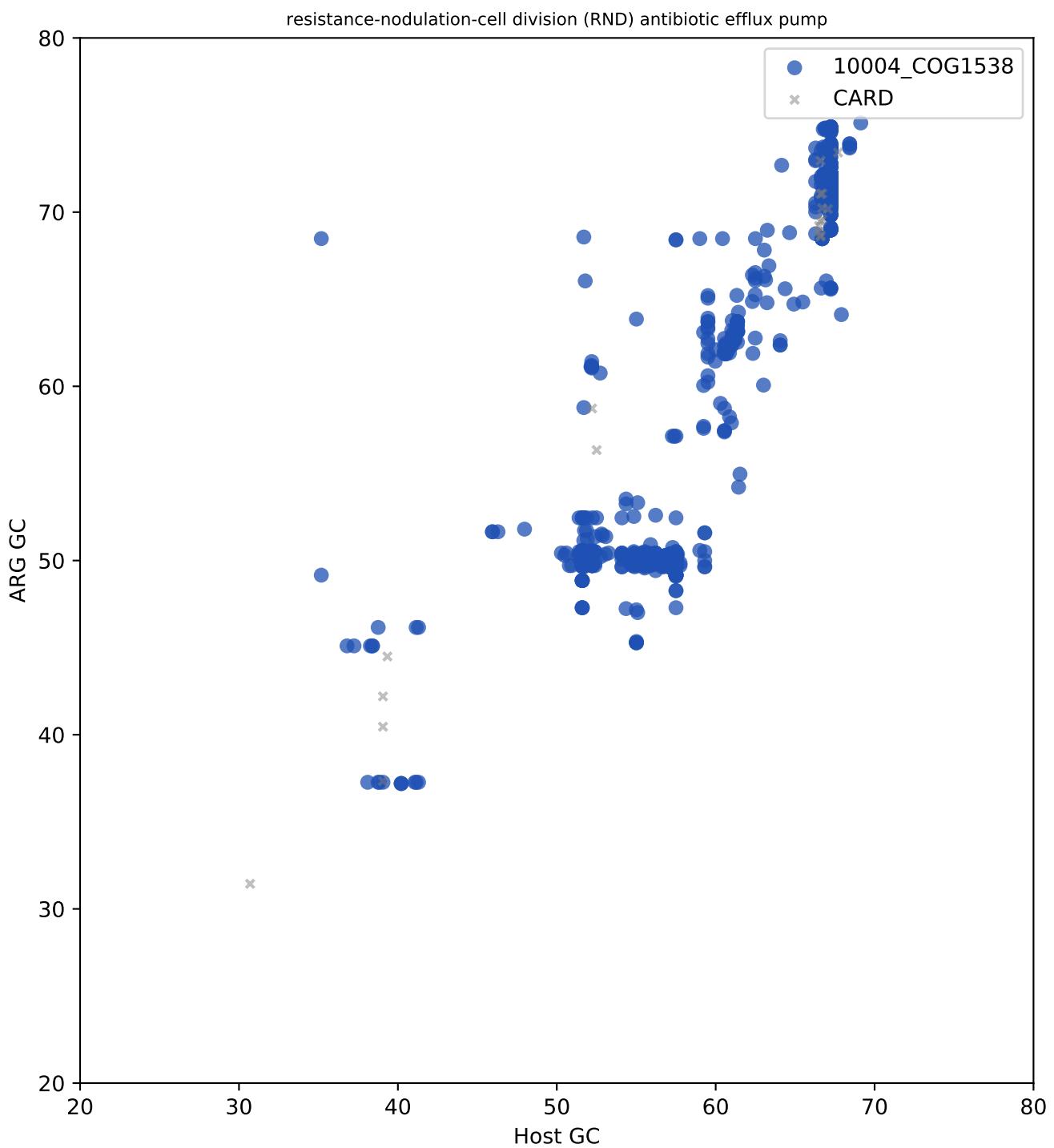


Supplementary Figure S1: (continued).

resistance-nodulation-cell division (RND) antibiotic efflux pump

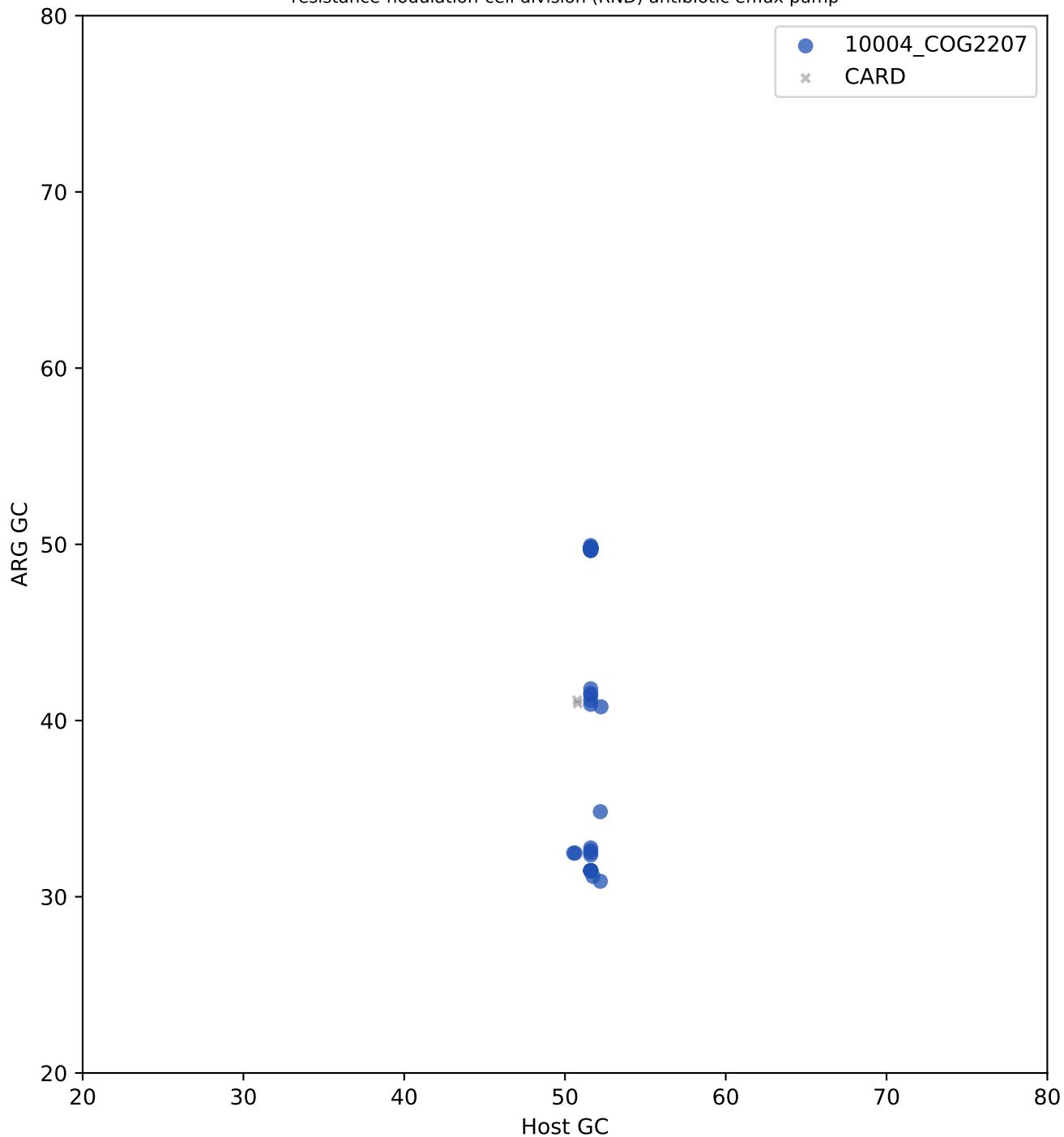


Supplementary Figure S1: (continued).

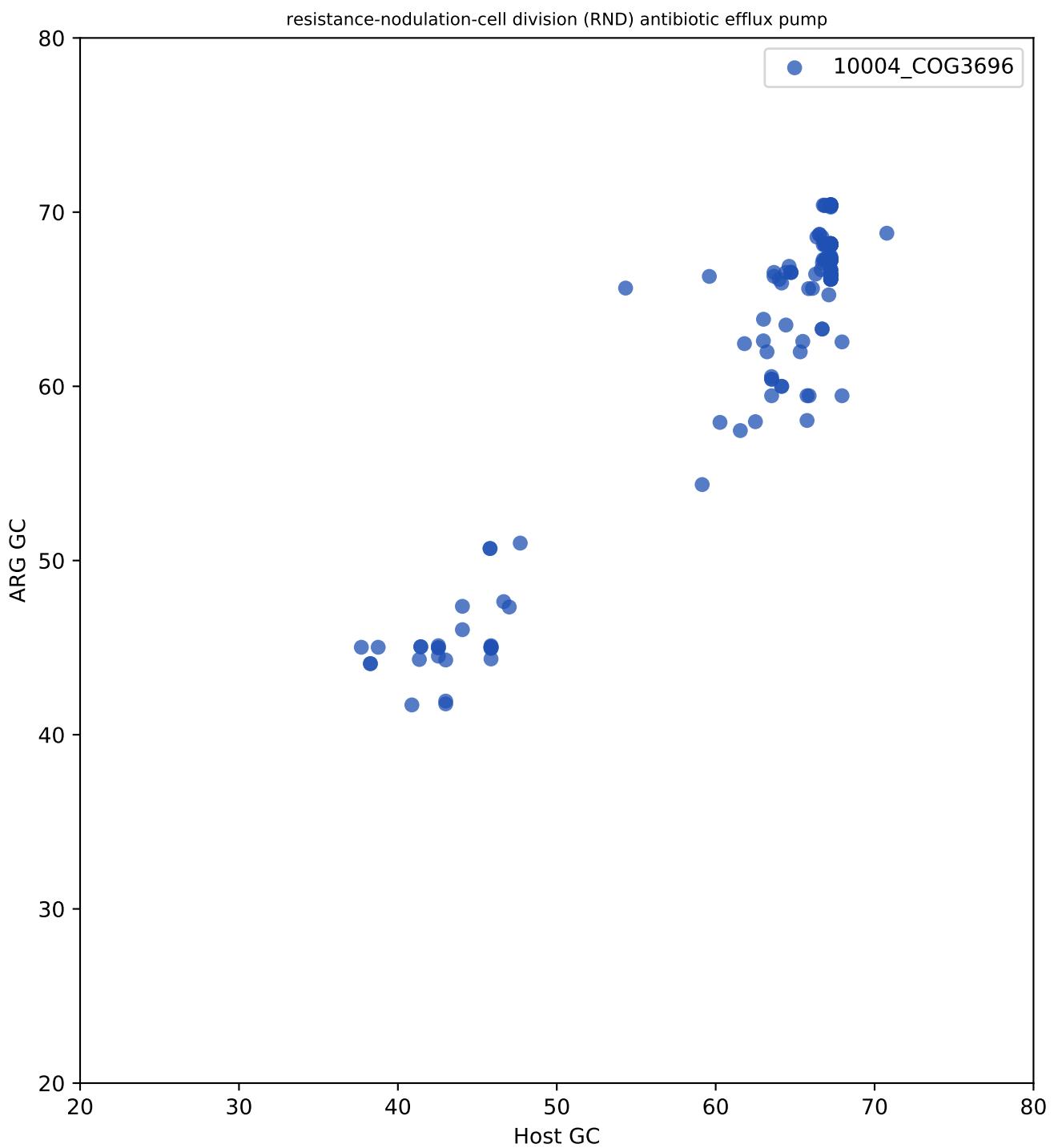


Supplementary Figure S1: (continued).

resistance-nodulation-cell division (RND) antibiotic efflux pump

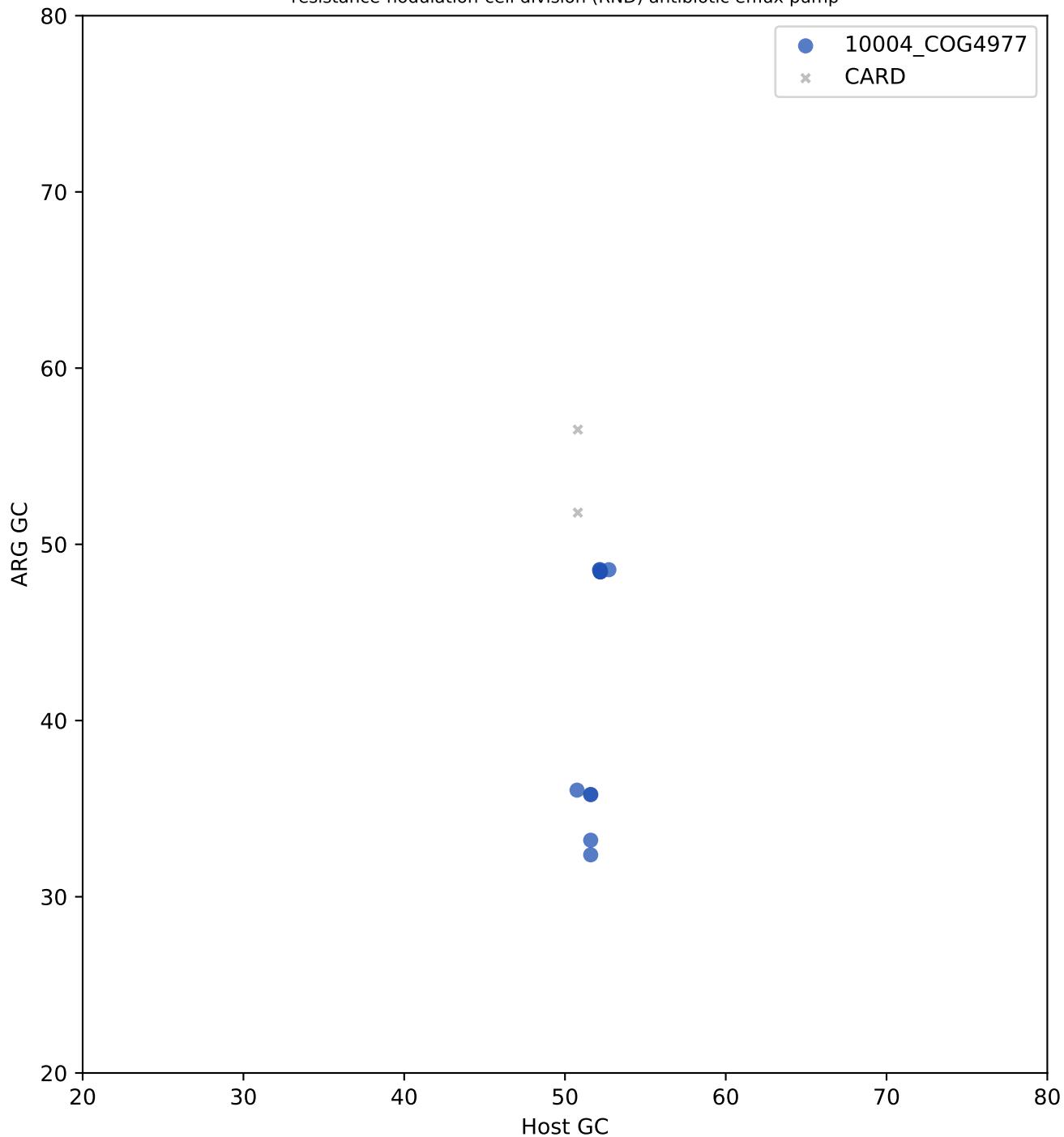


Supplementary Figure S1: (continued).

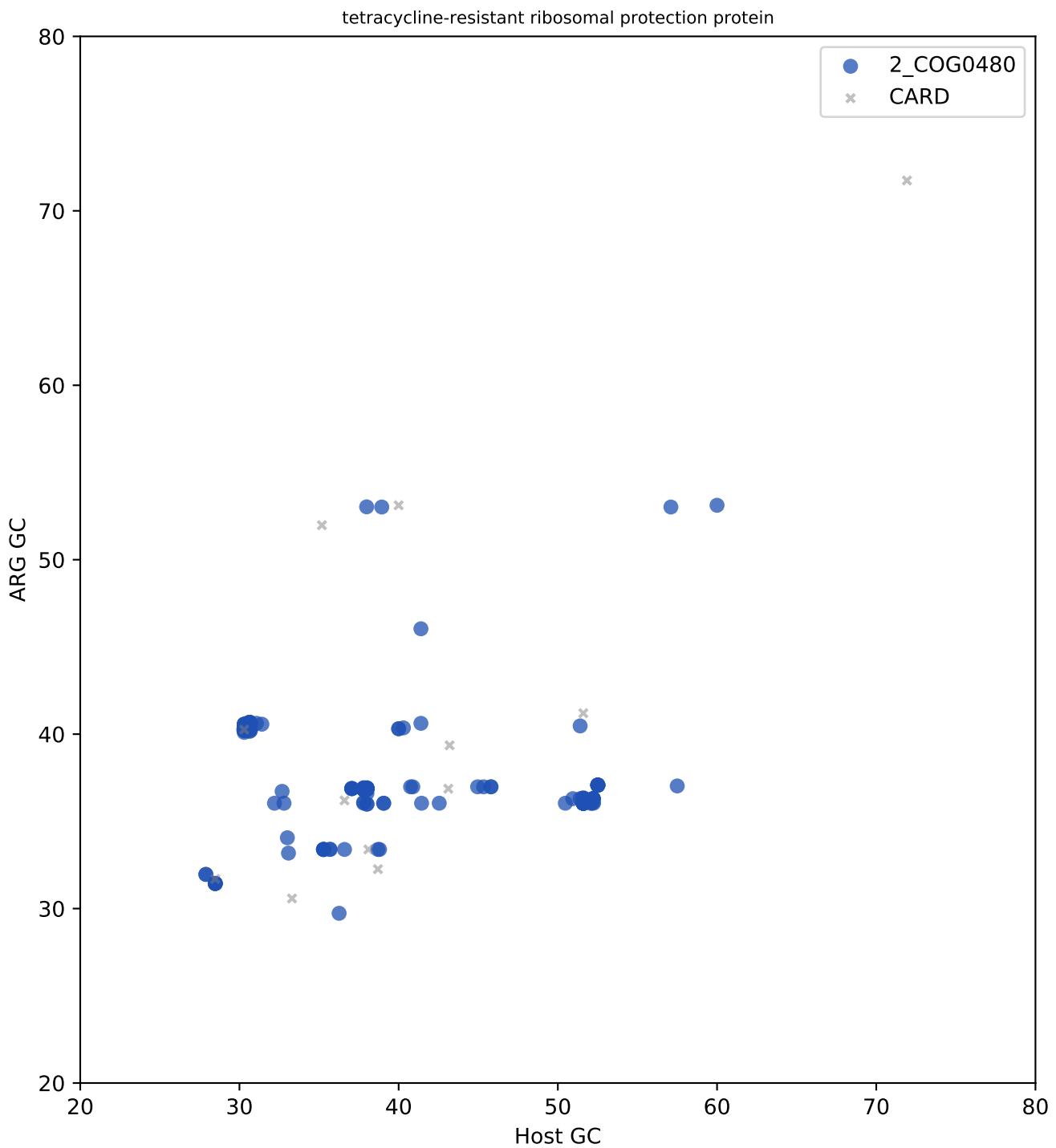


Supplementary Figure S1: (continued).

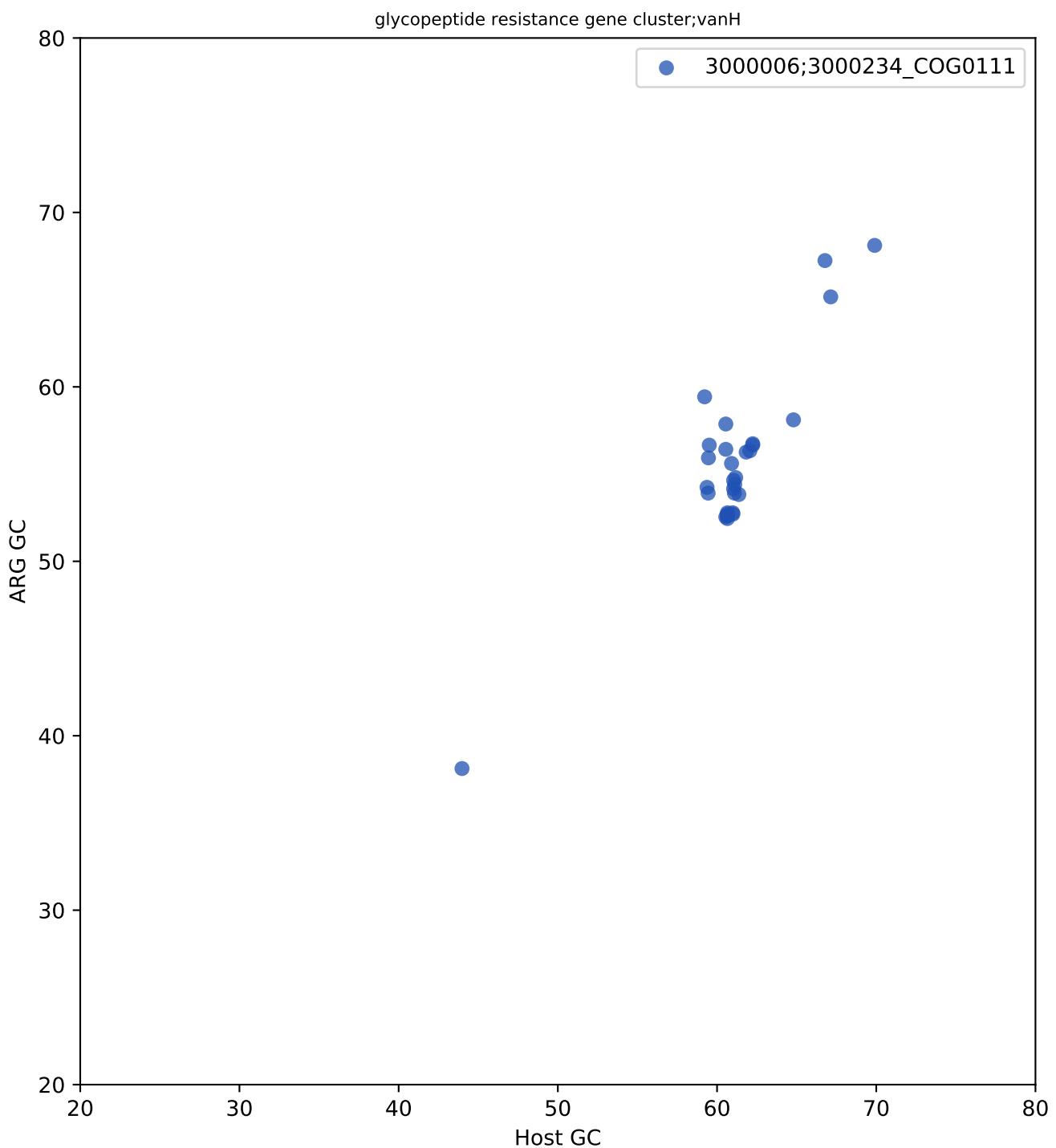
resistance-nodulation-cell division (RND) antibiotic efflux pump



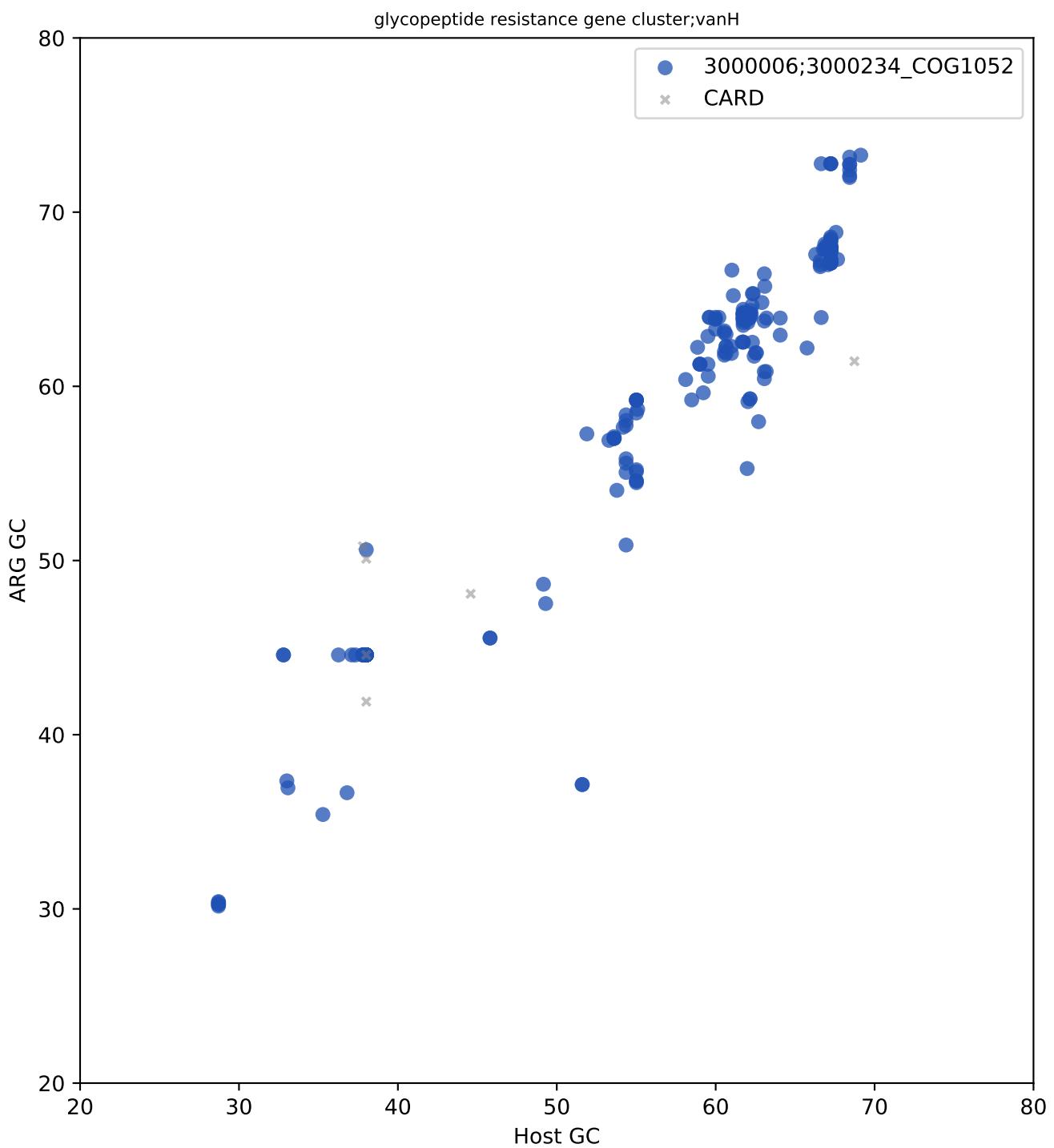
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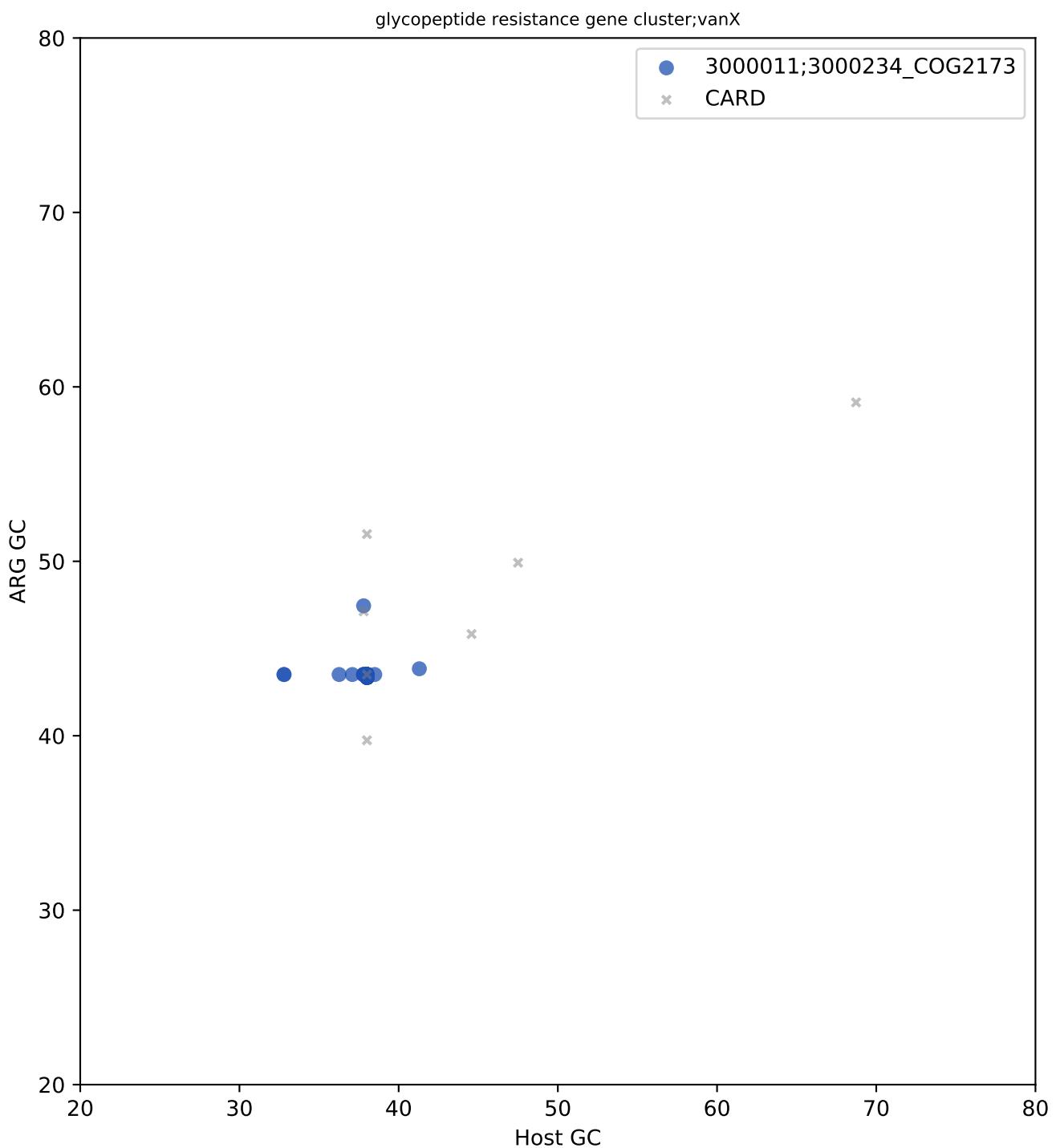
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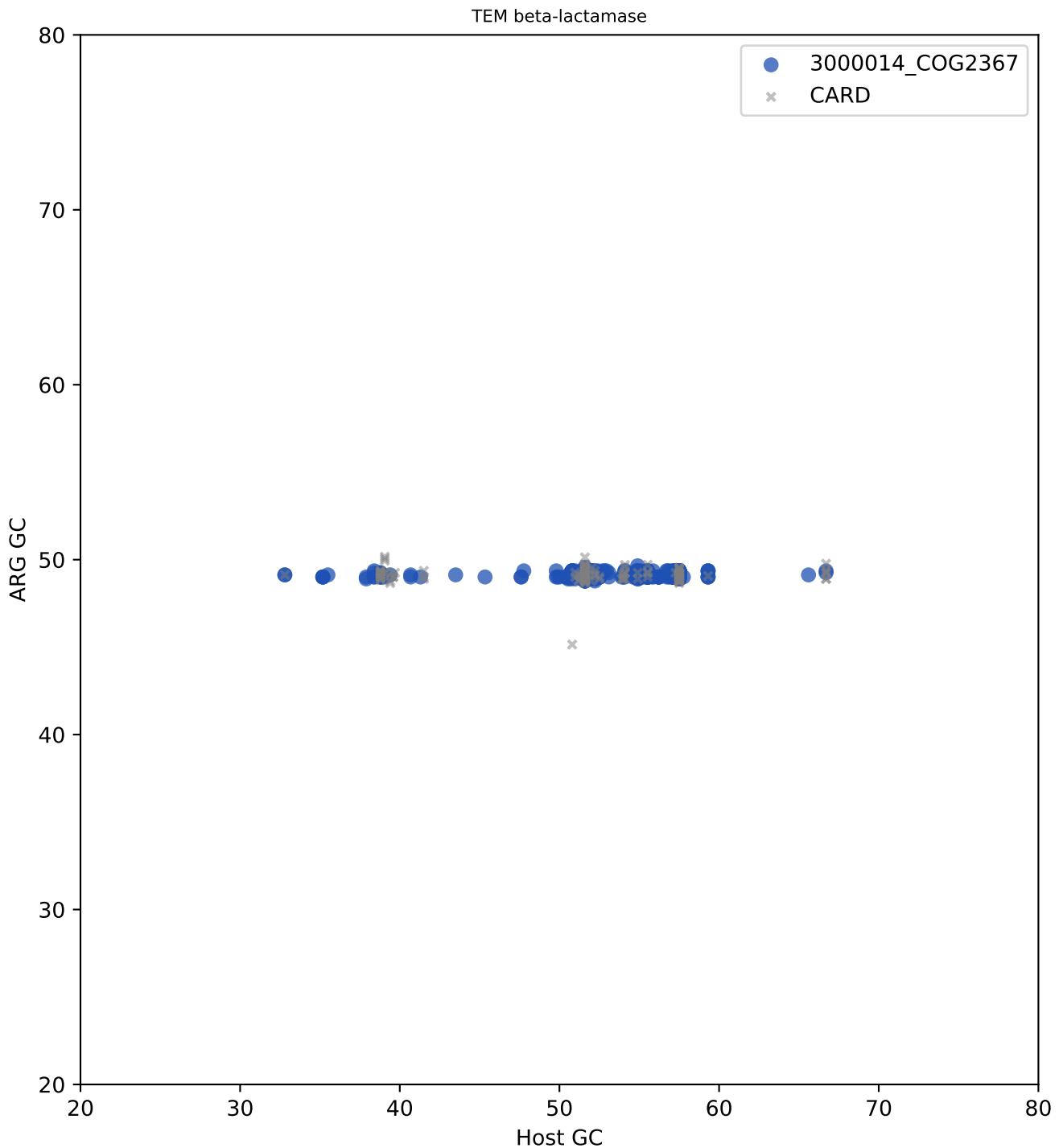
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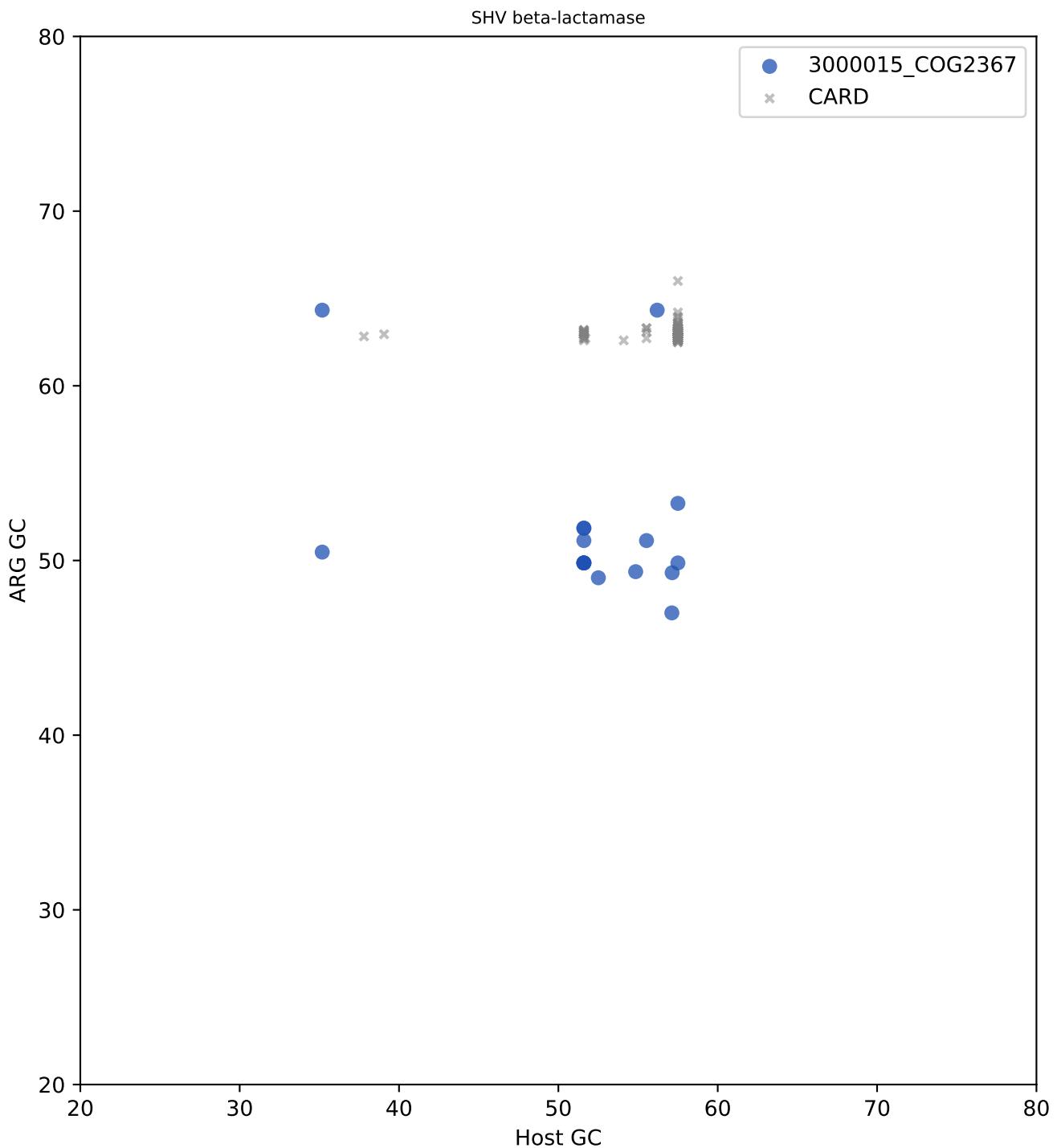
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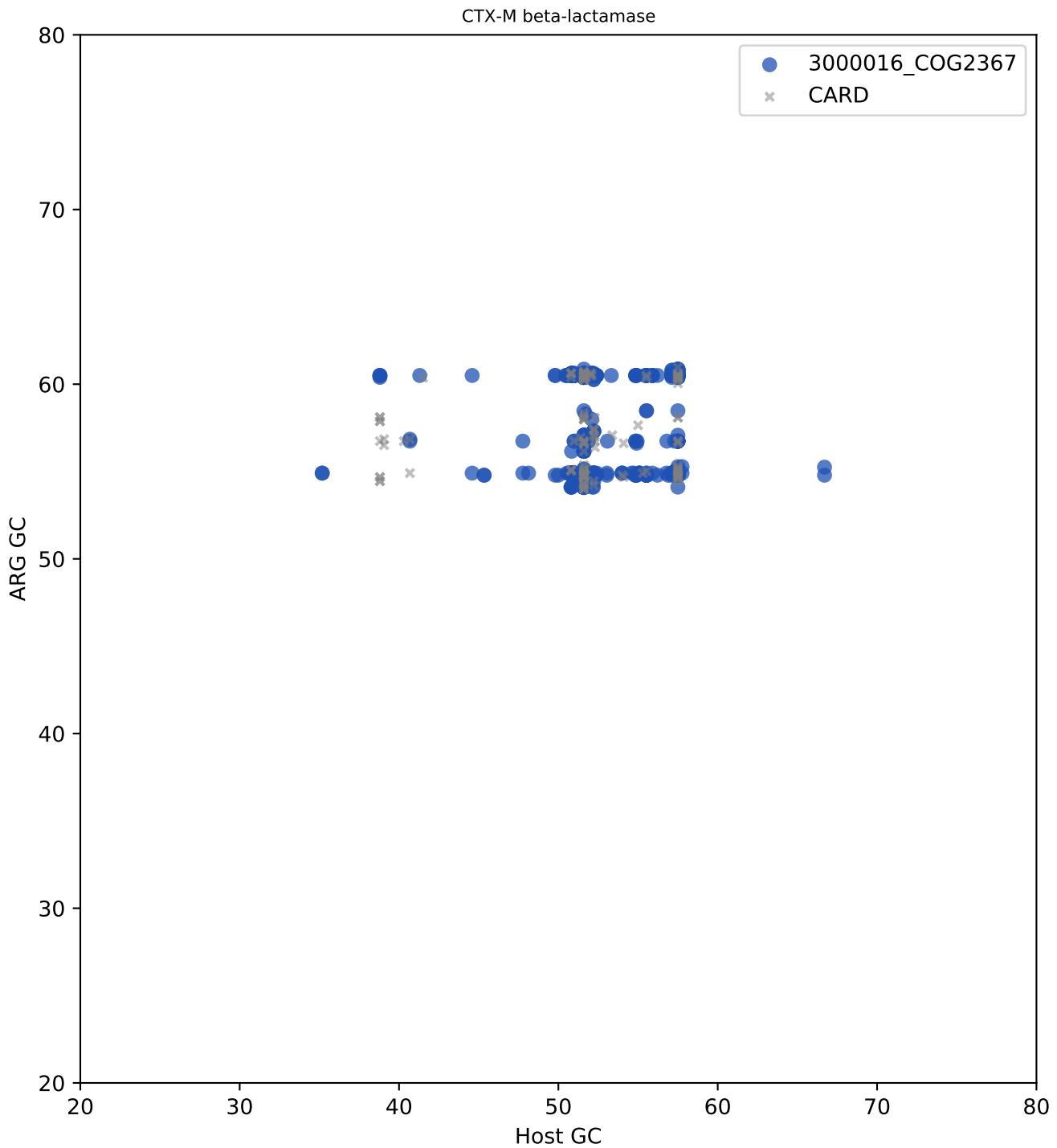
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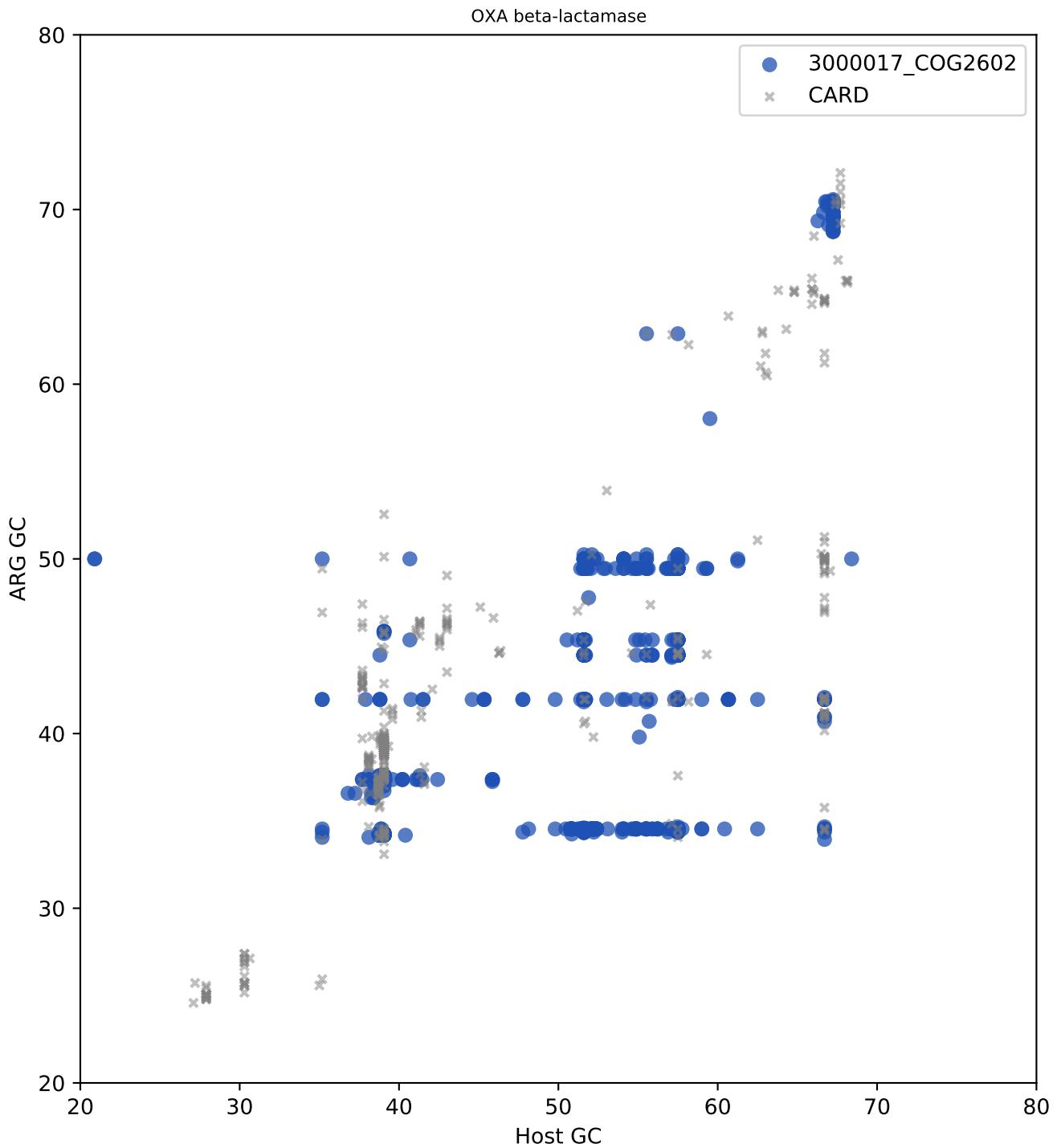
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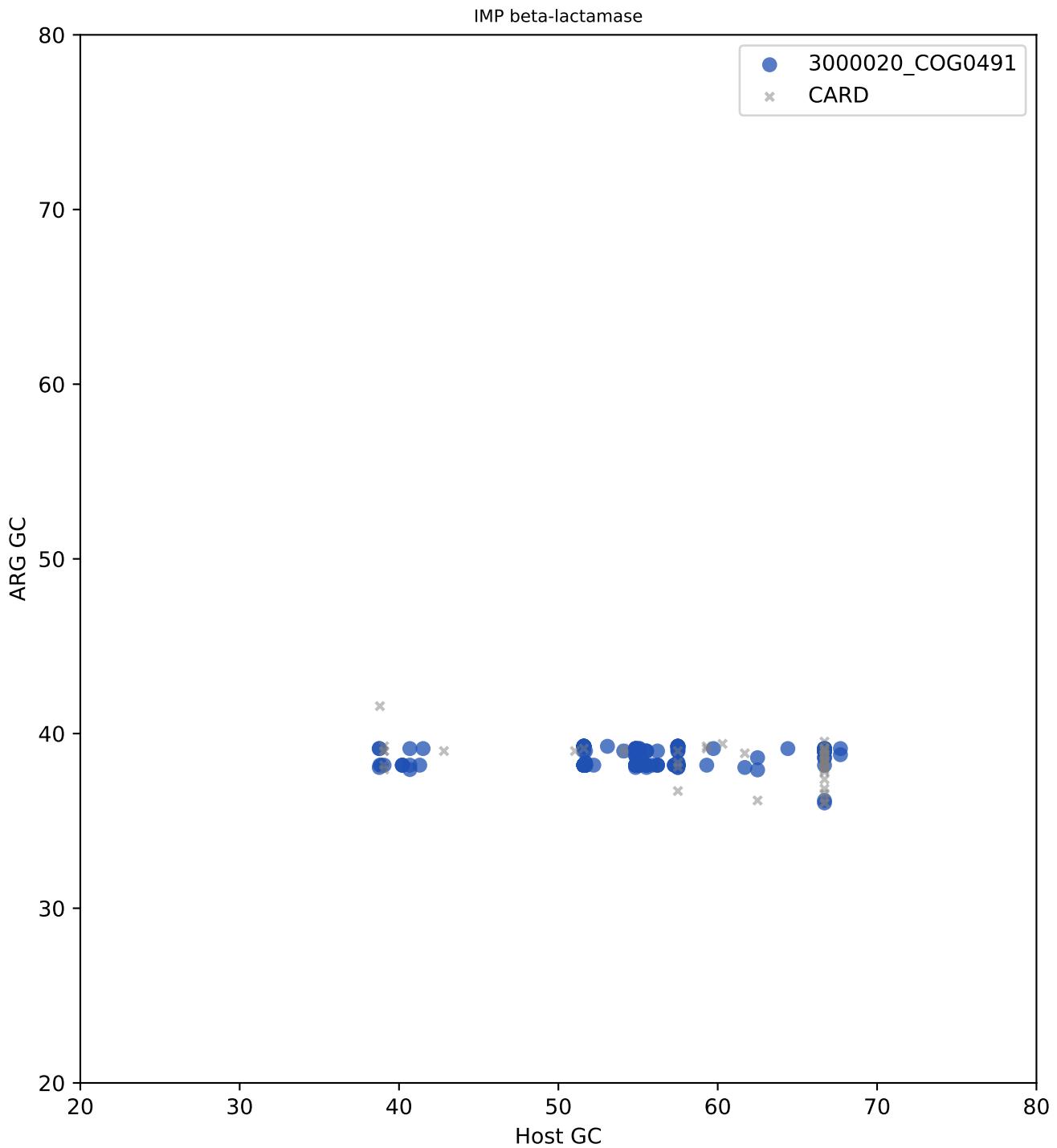
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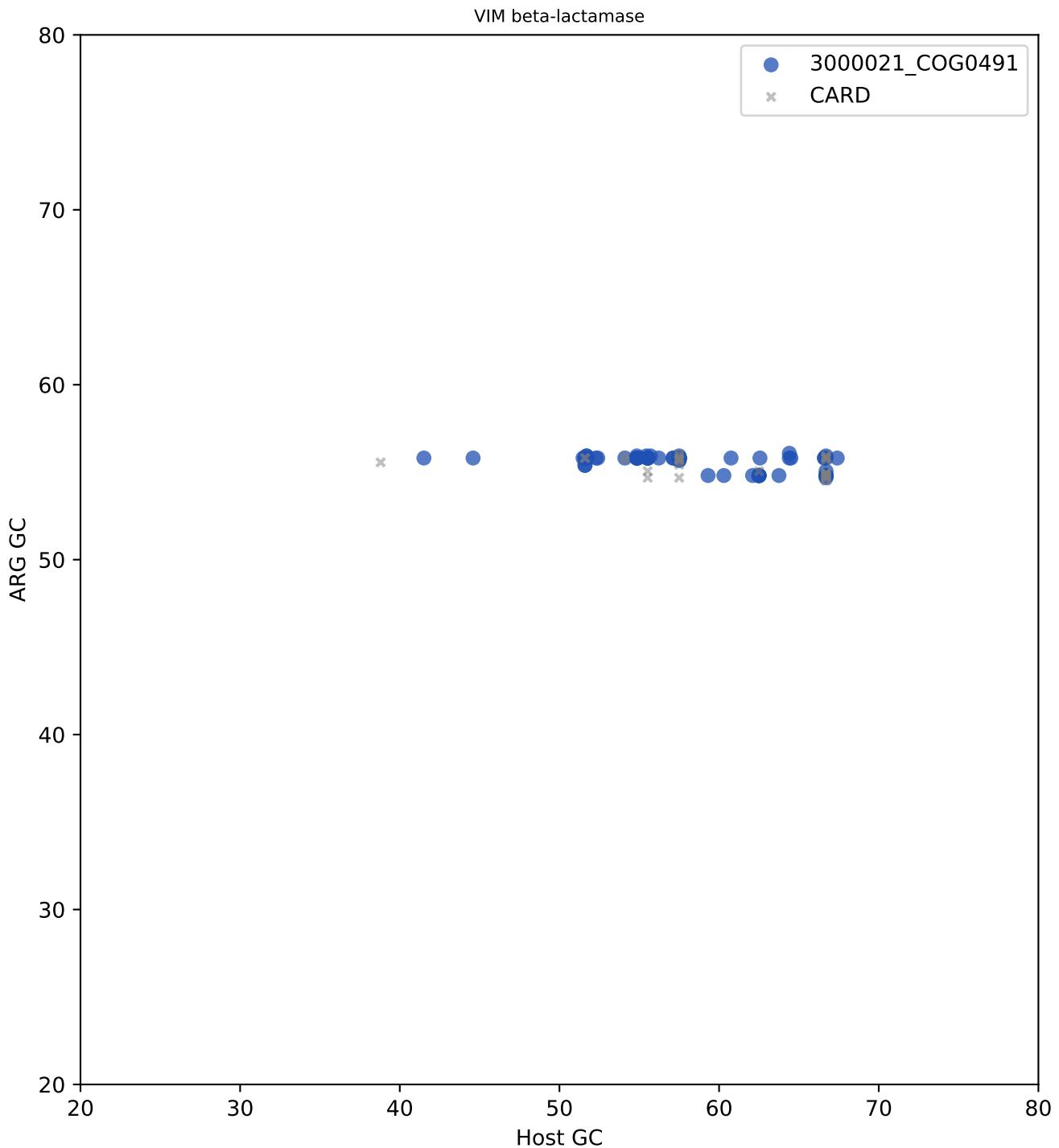
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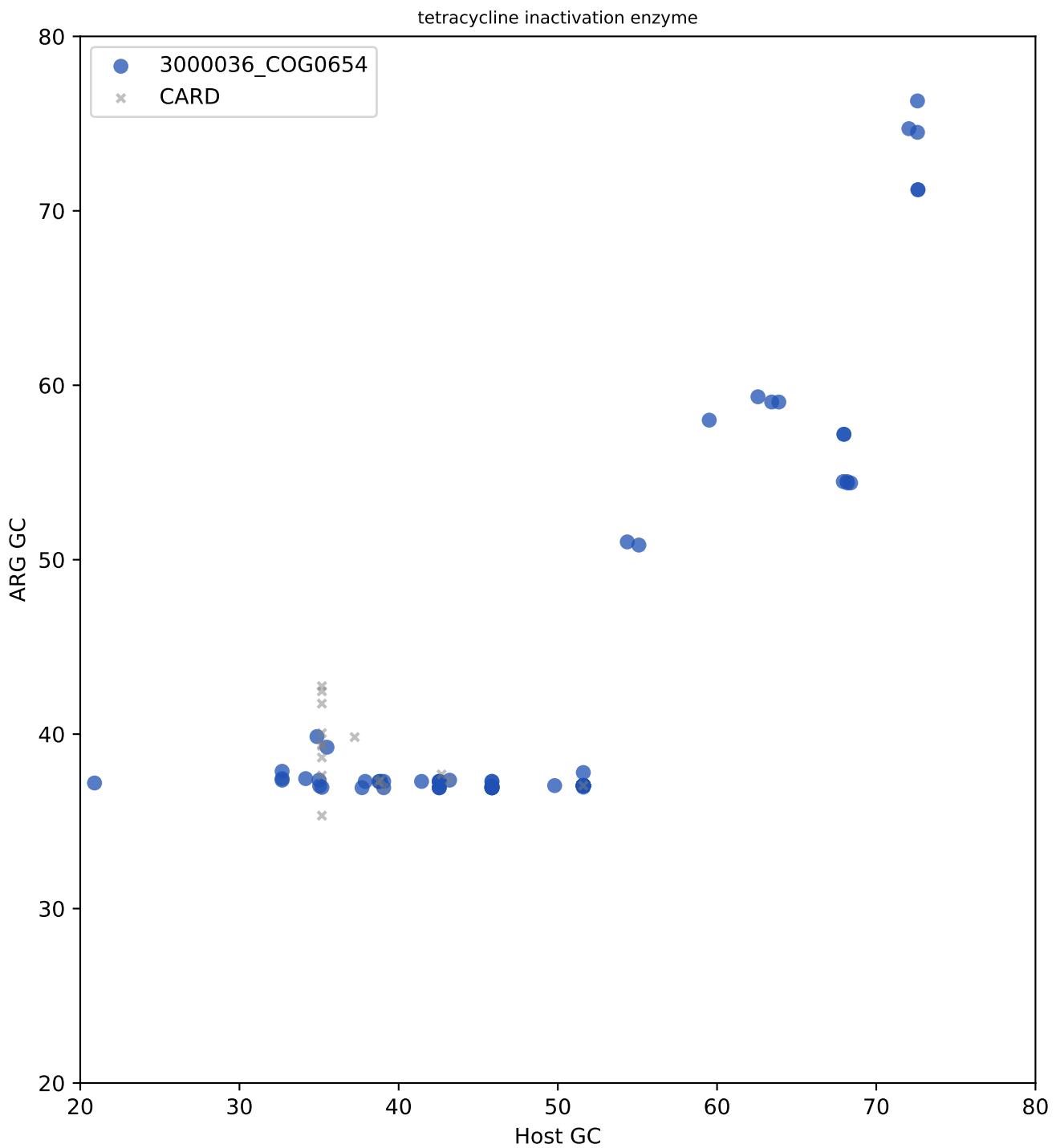
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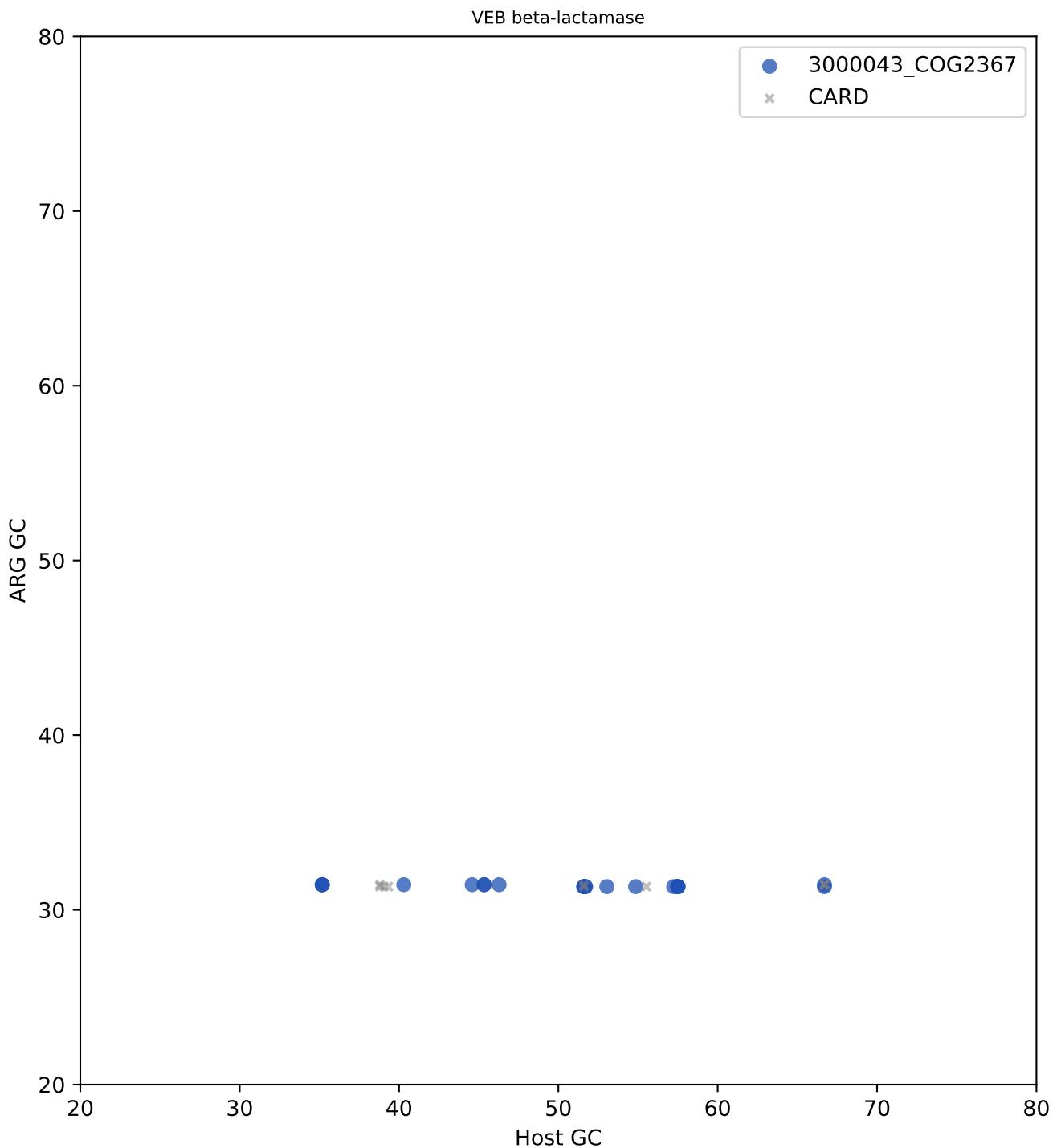
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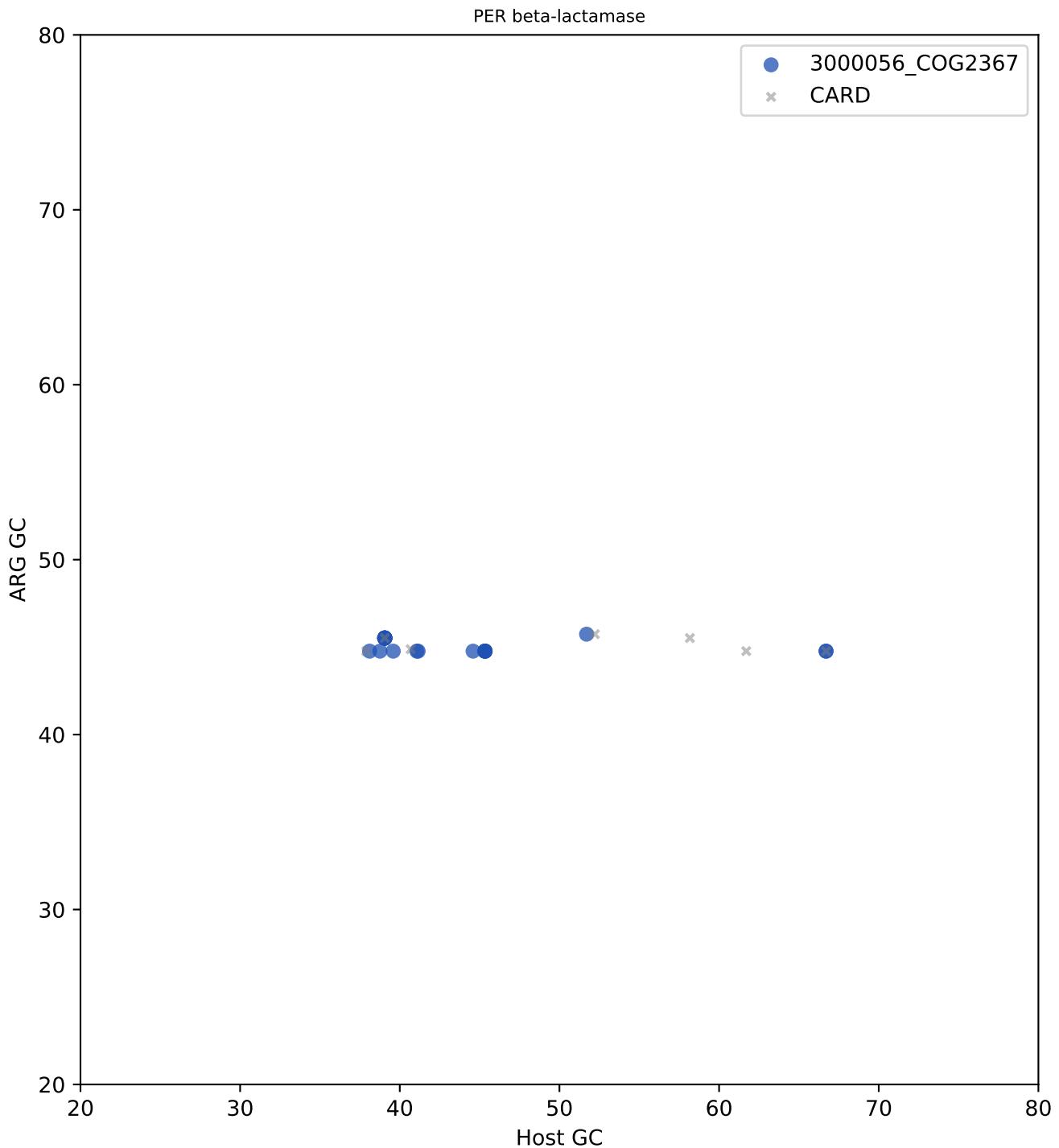
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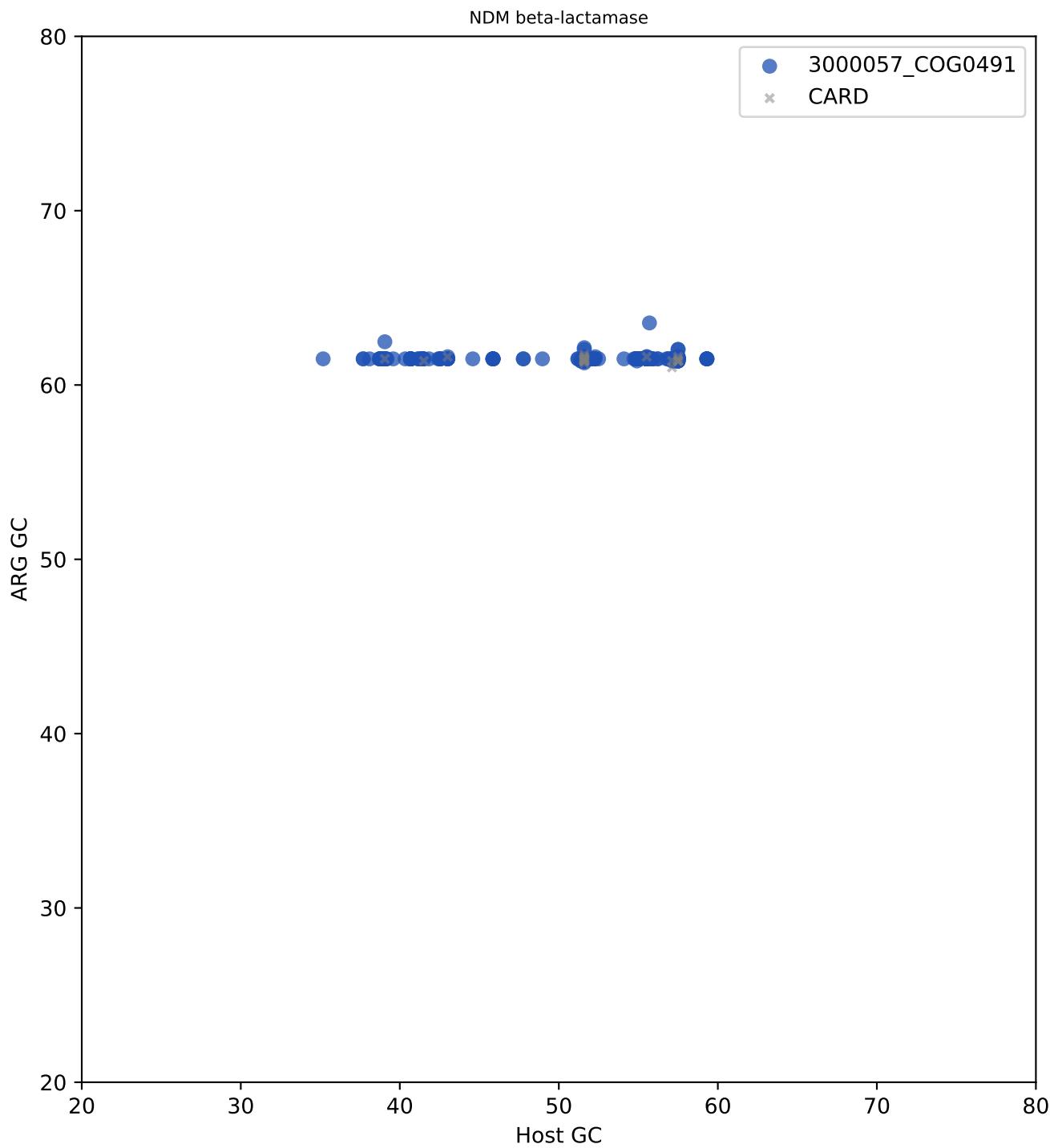
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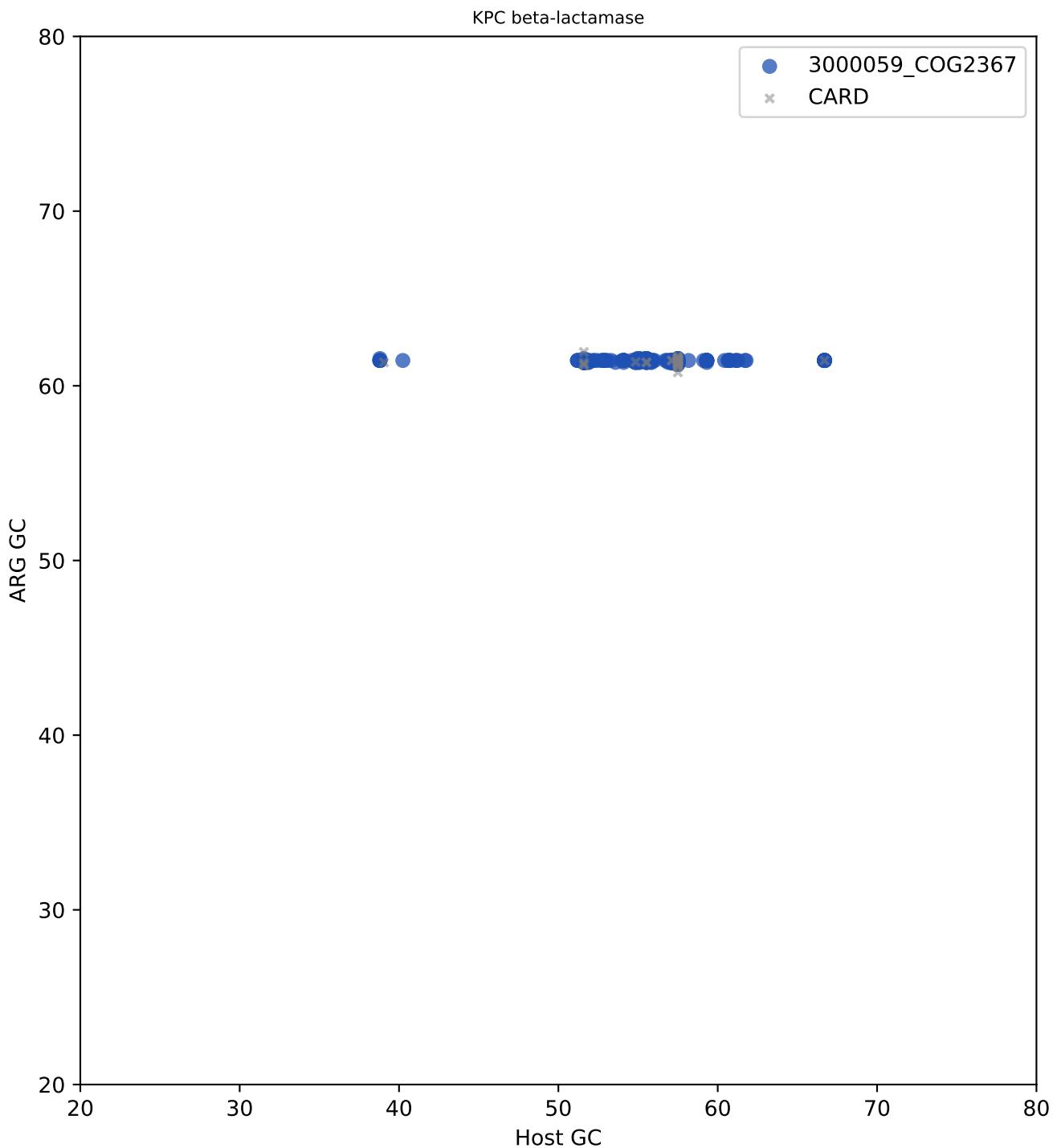
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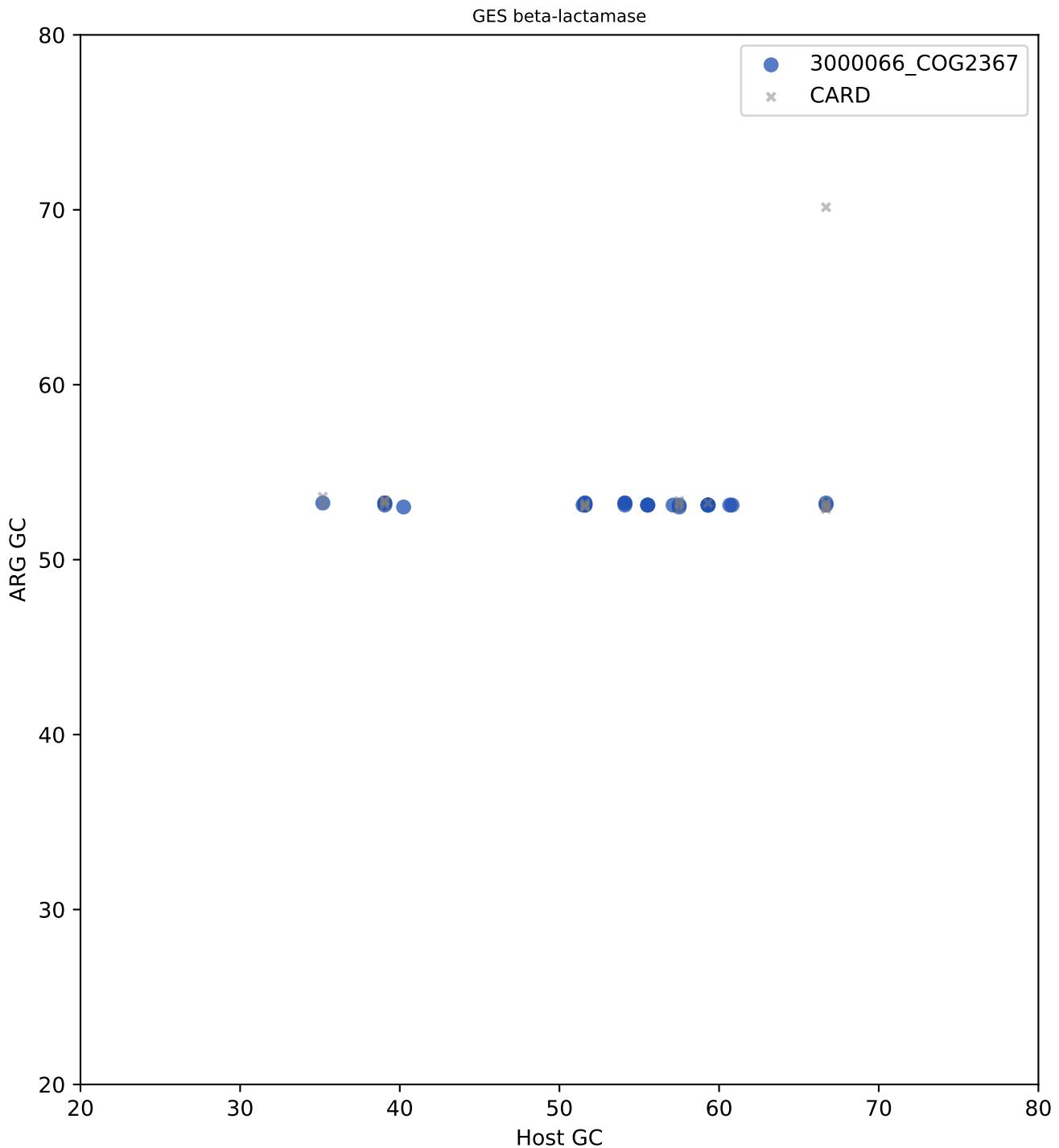
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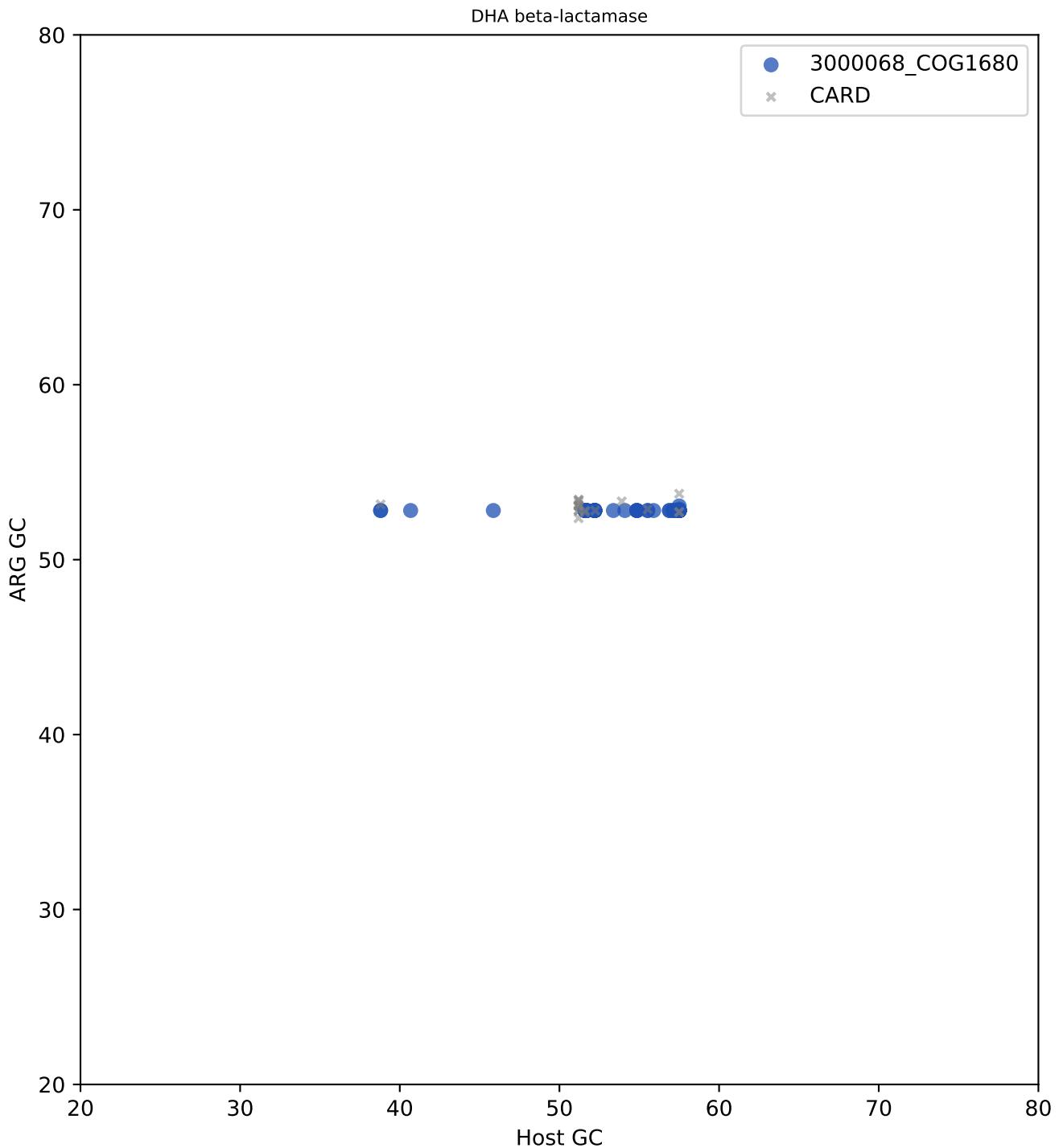
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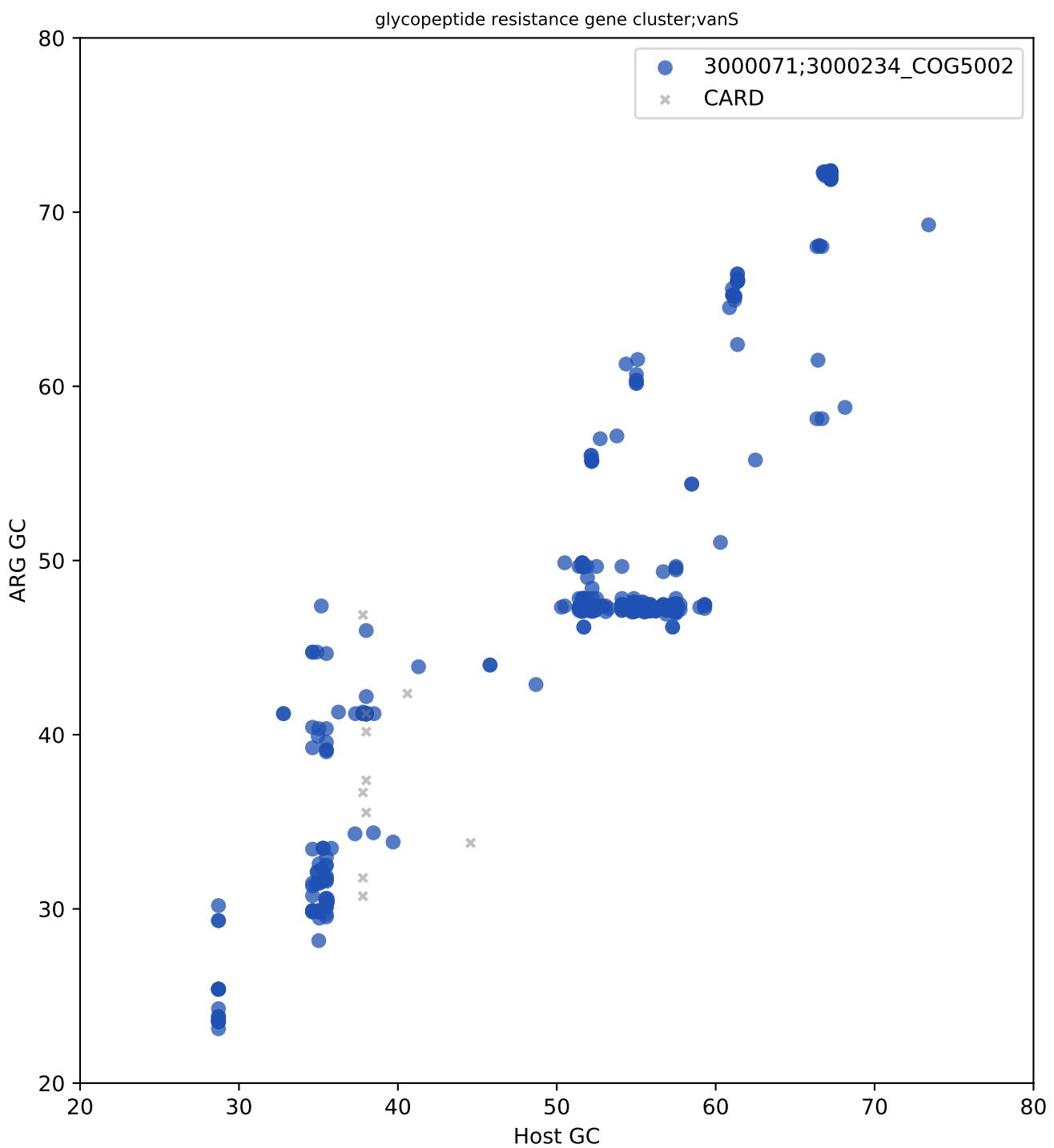
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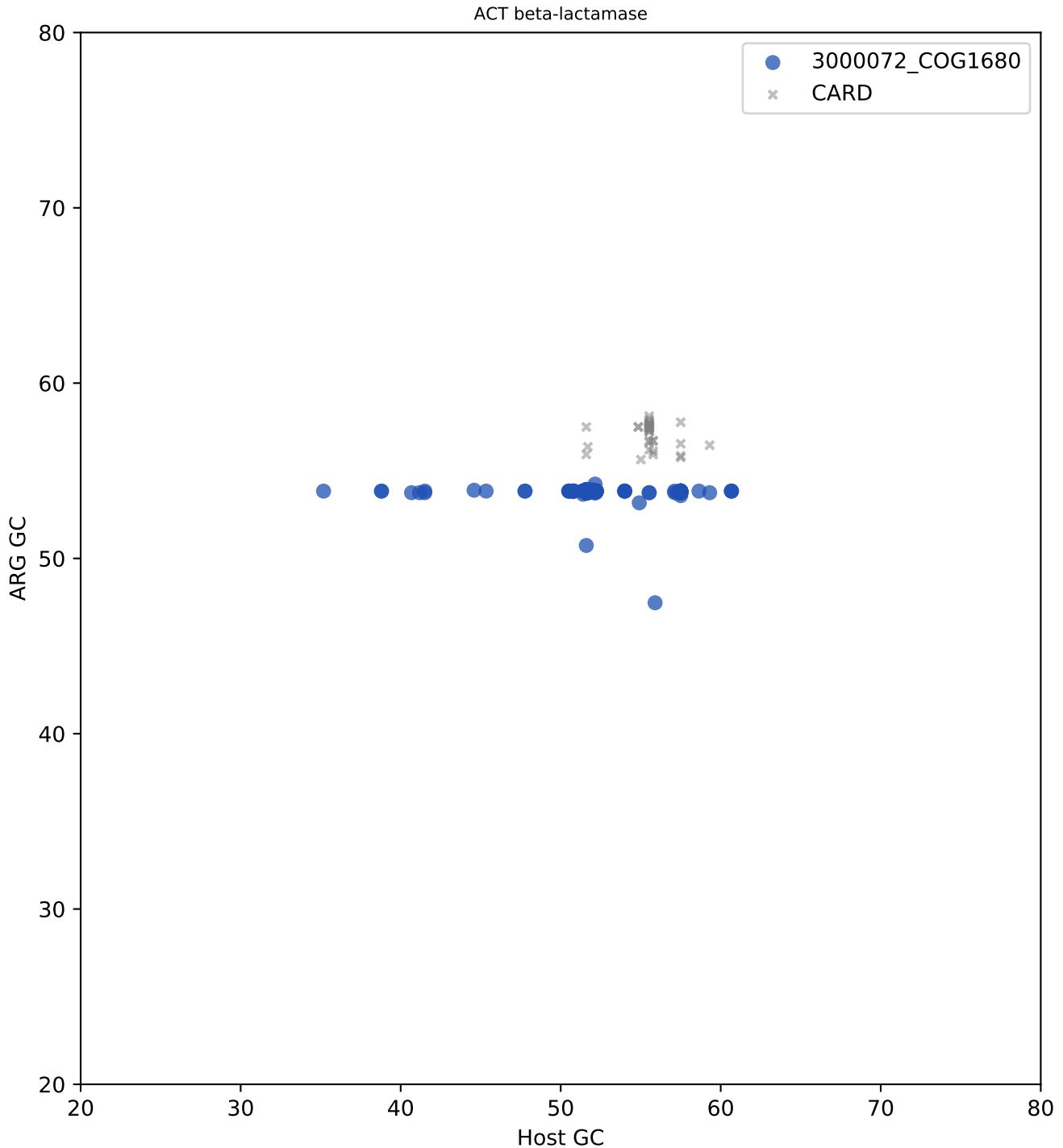
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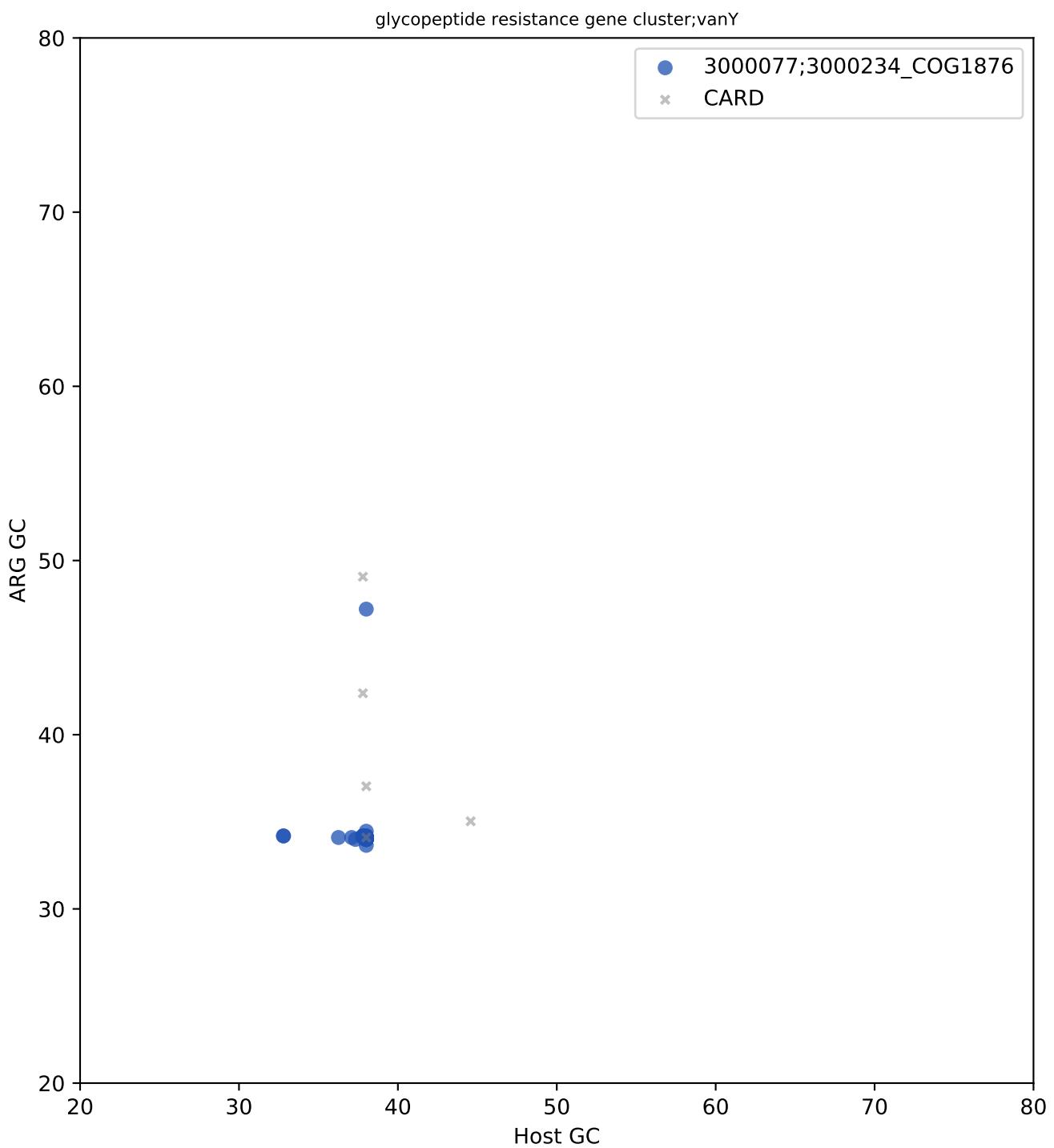
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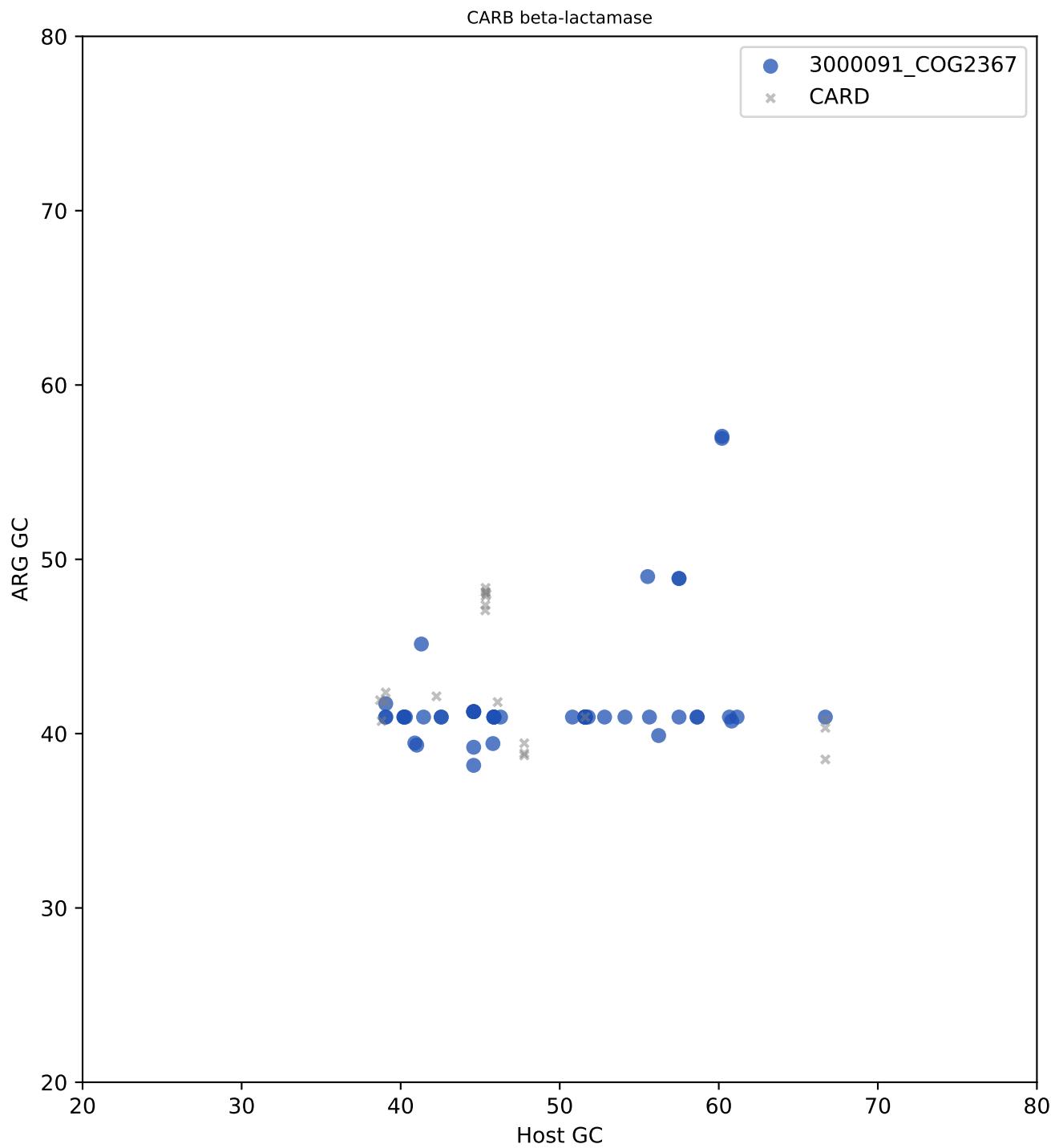
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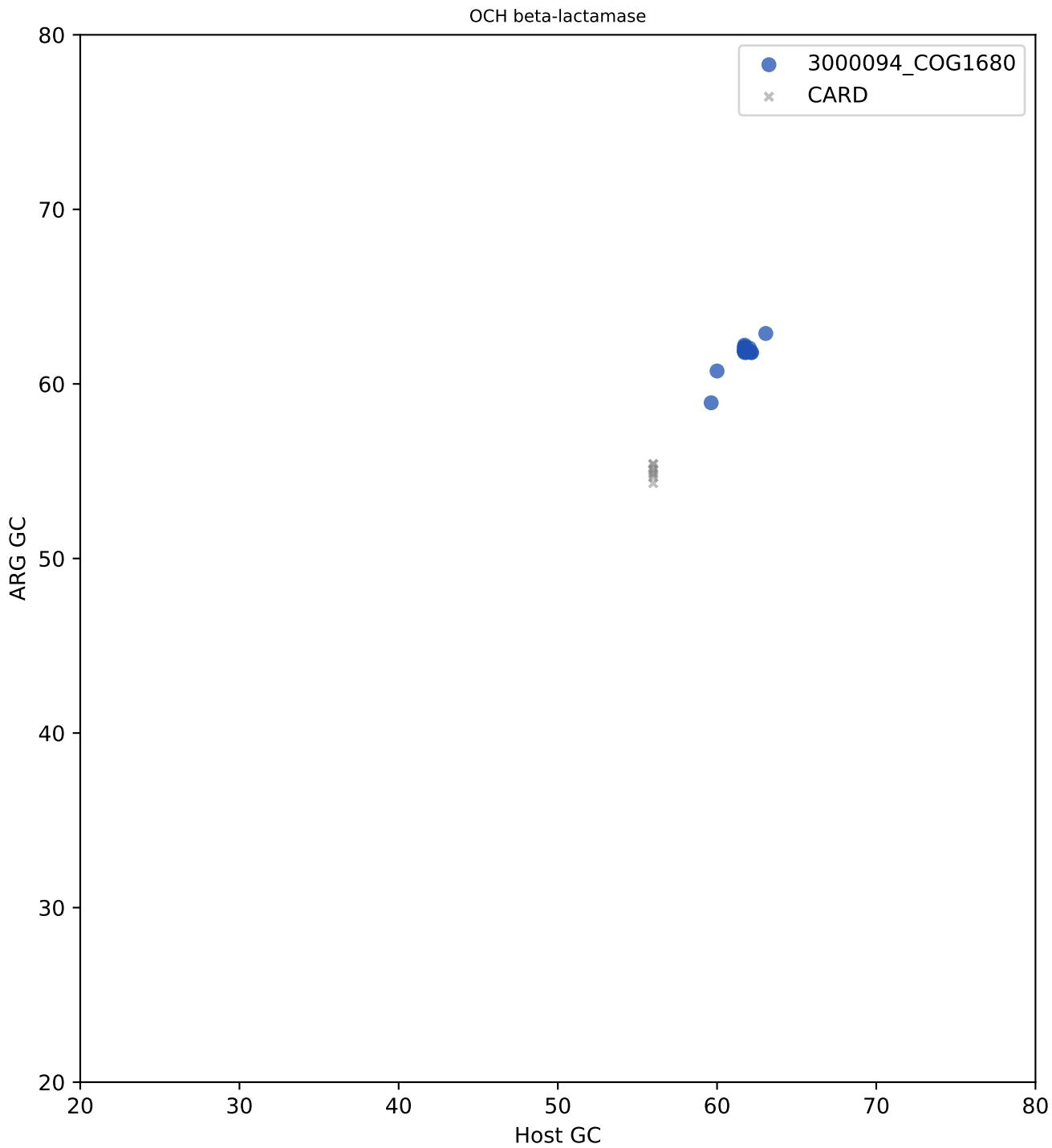
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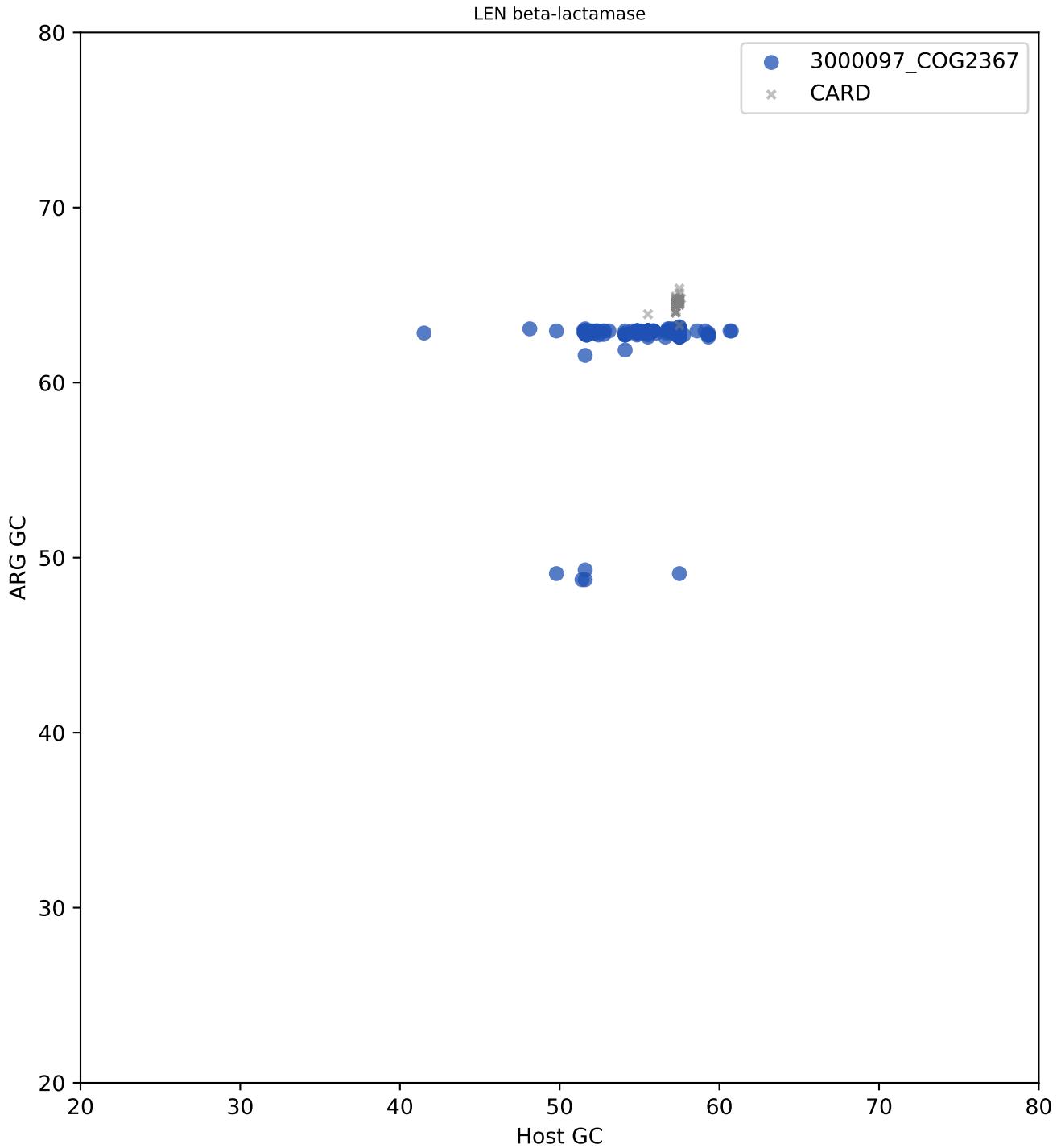
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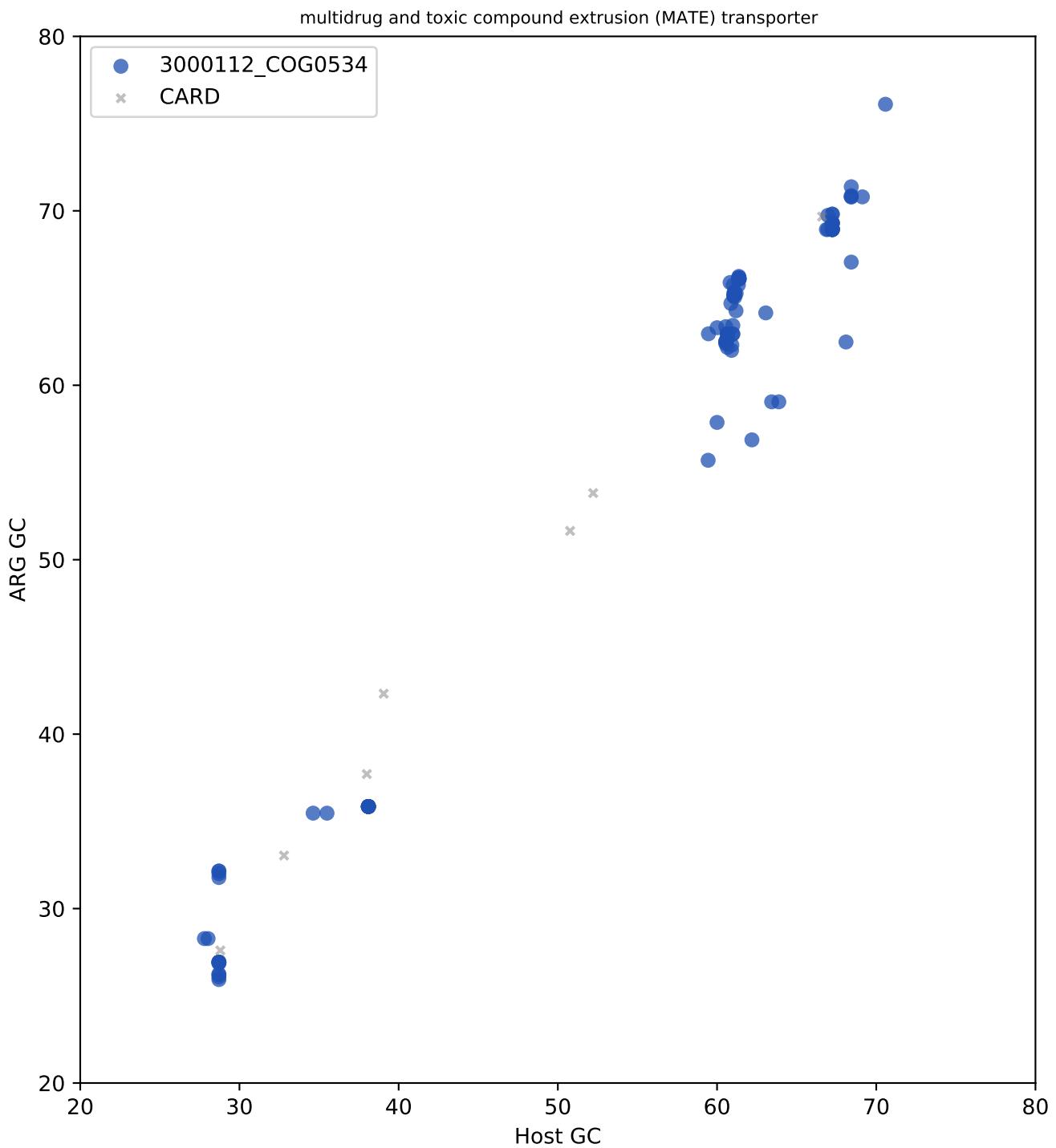
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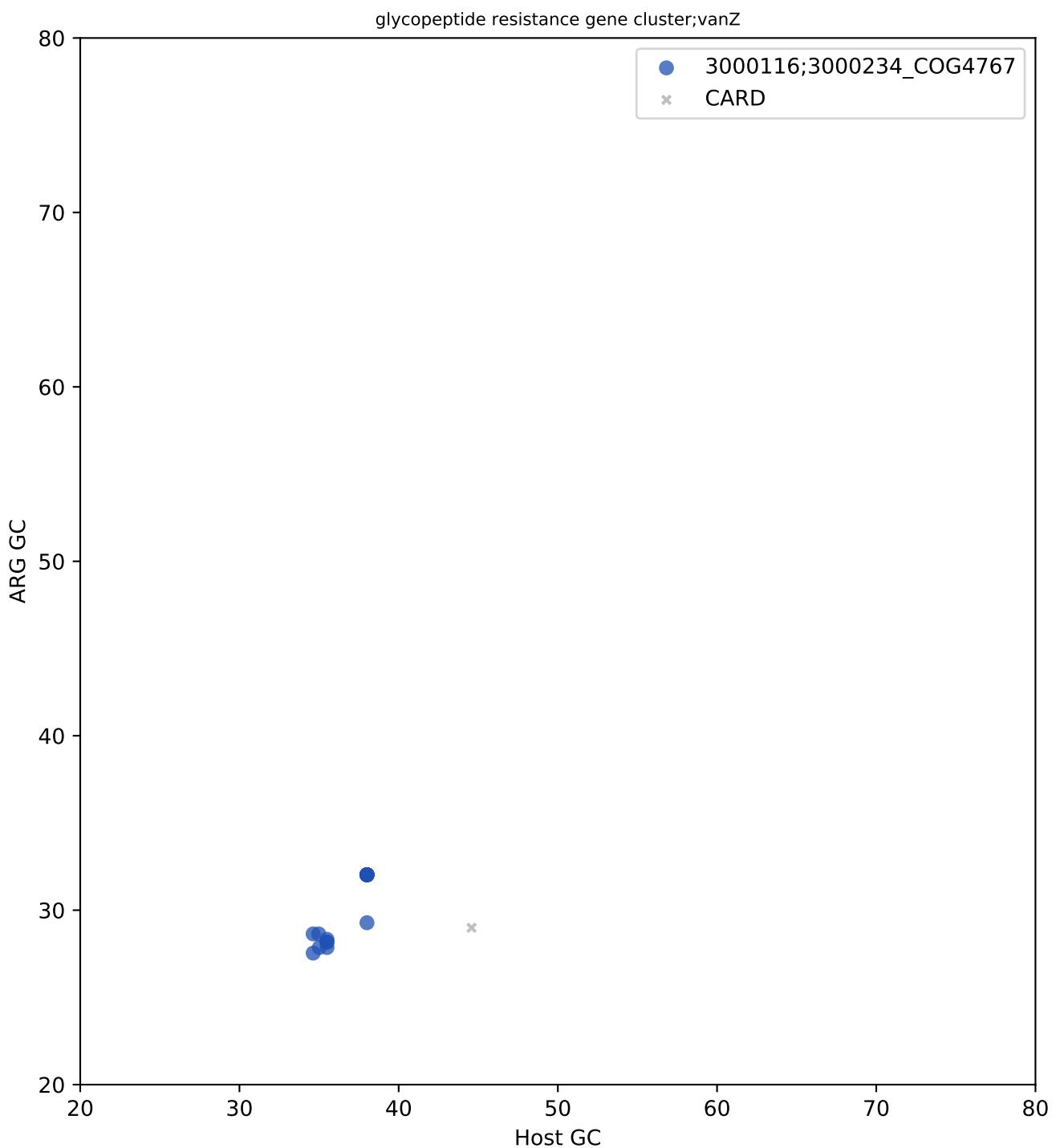
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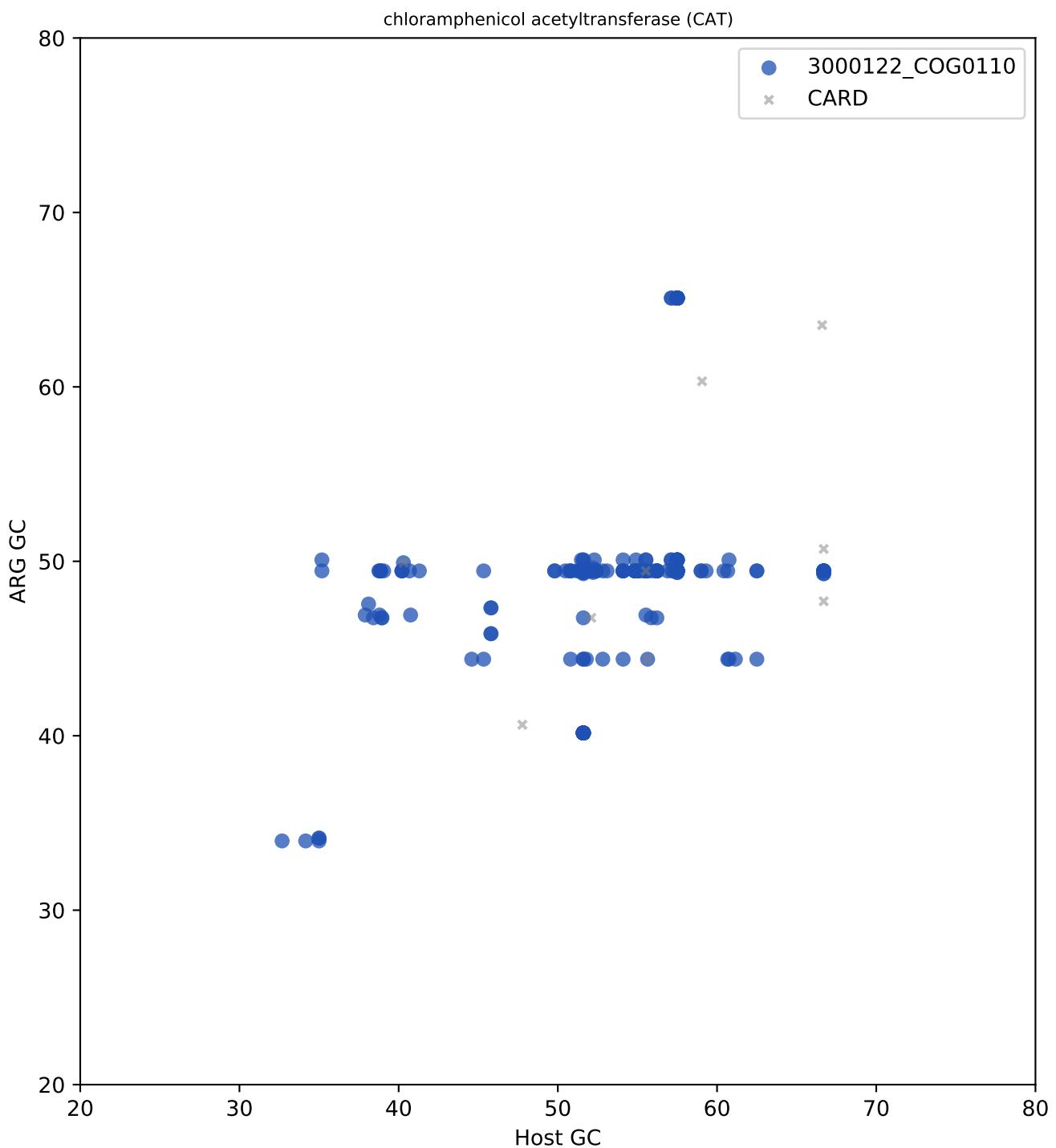
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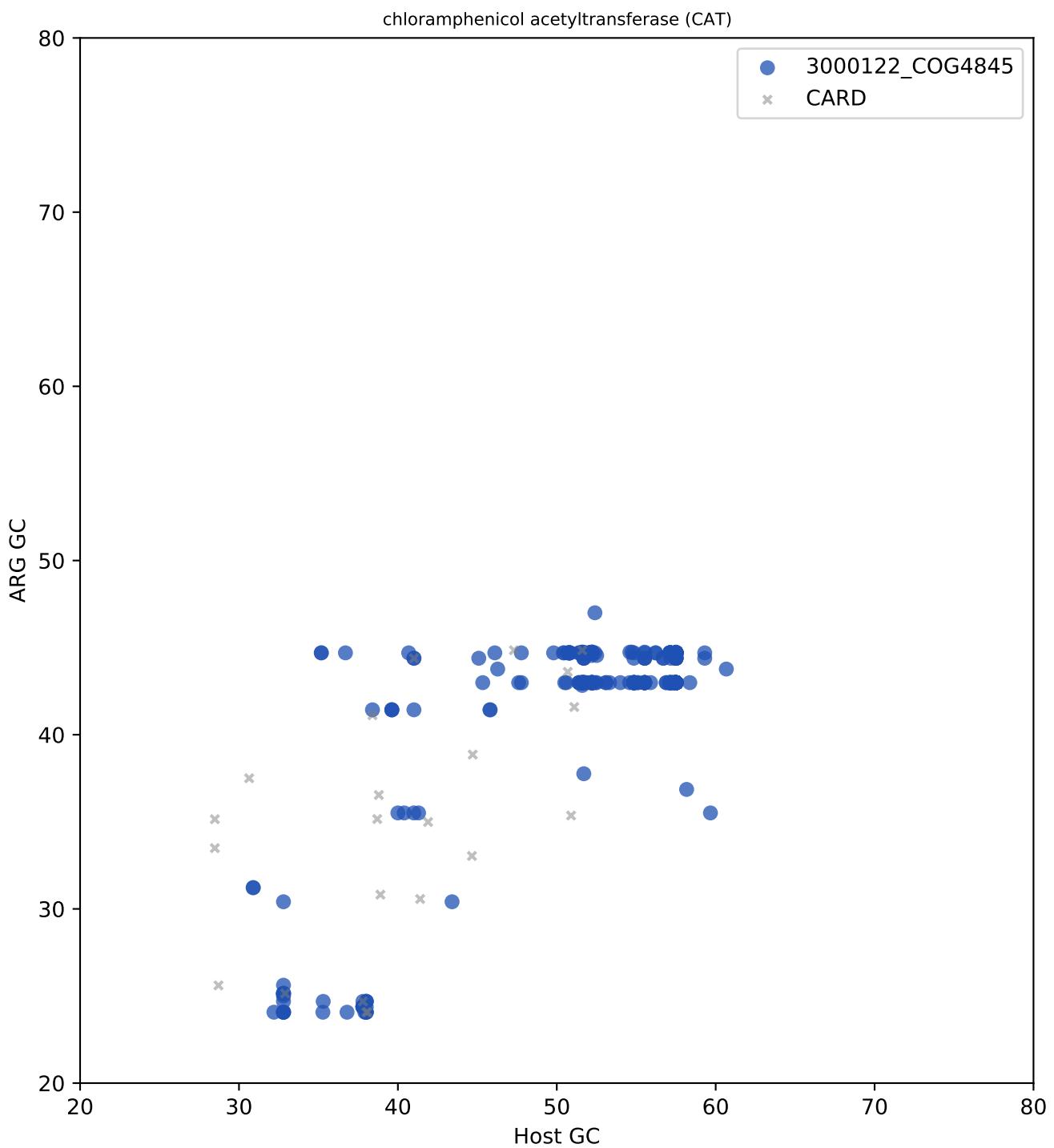
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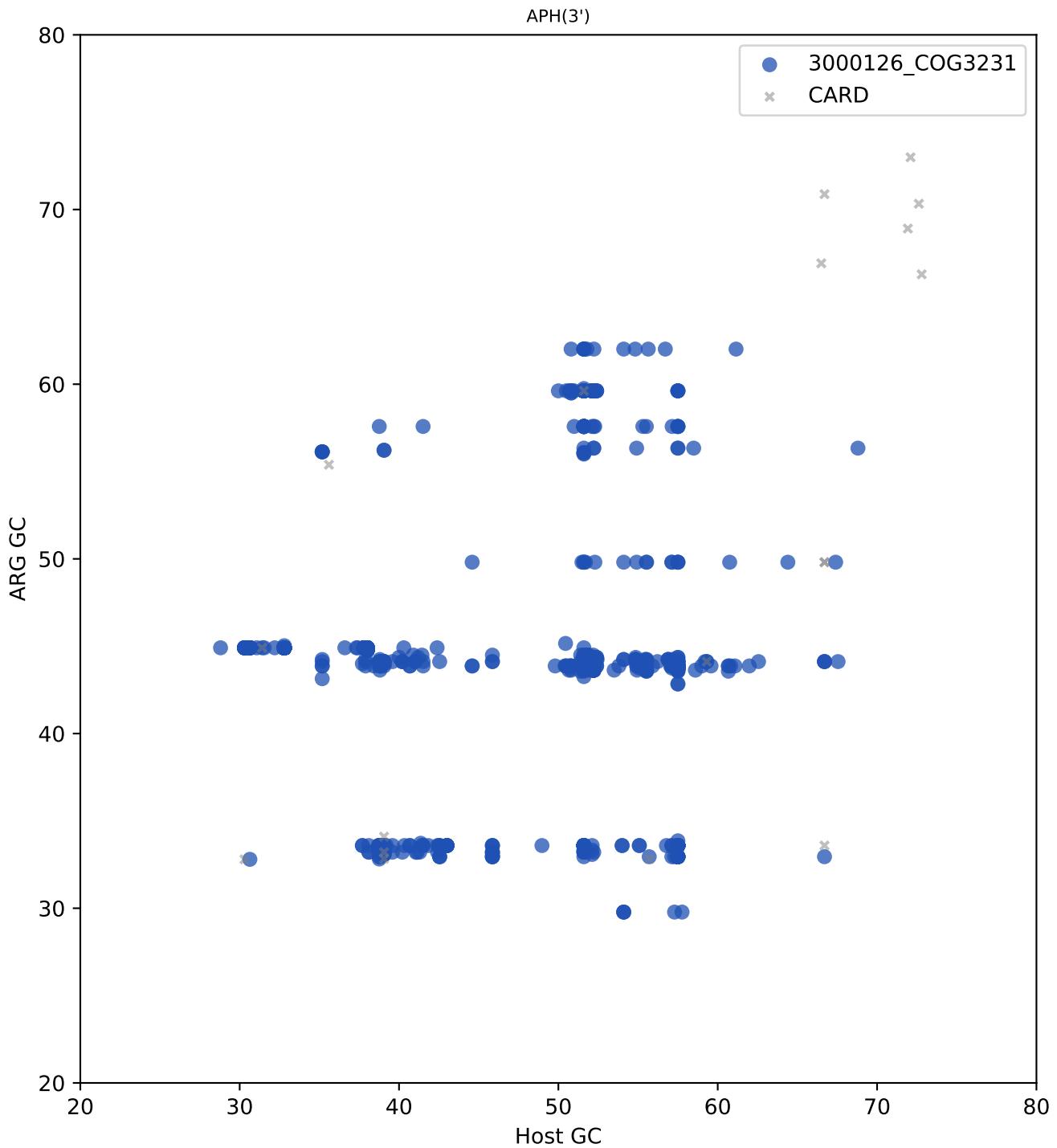
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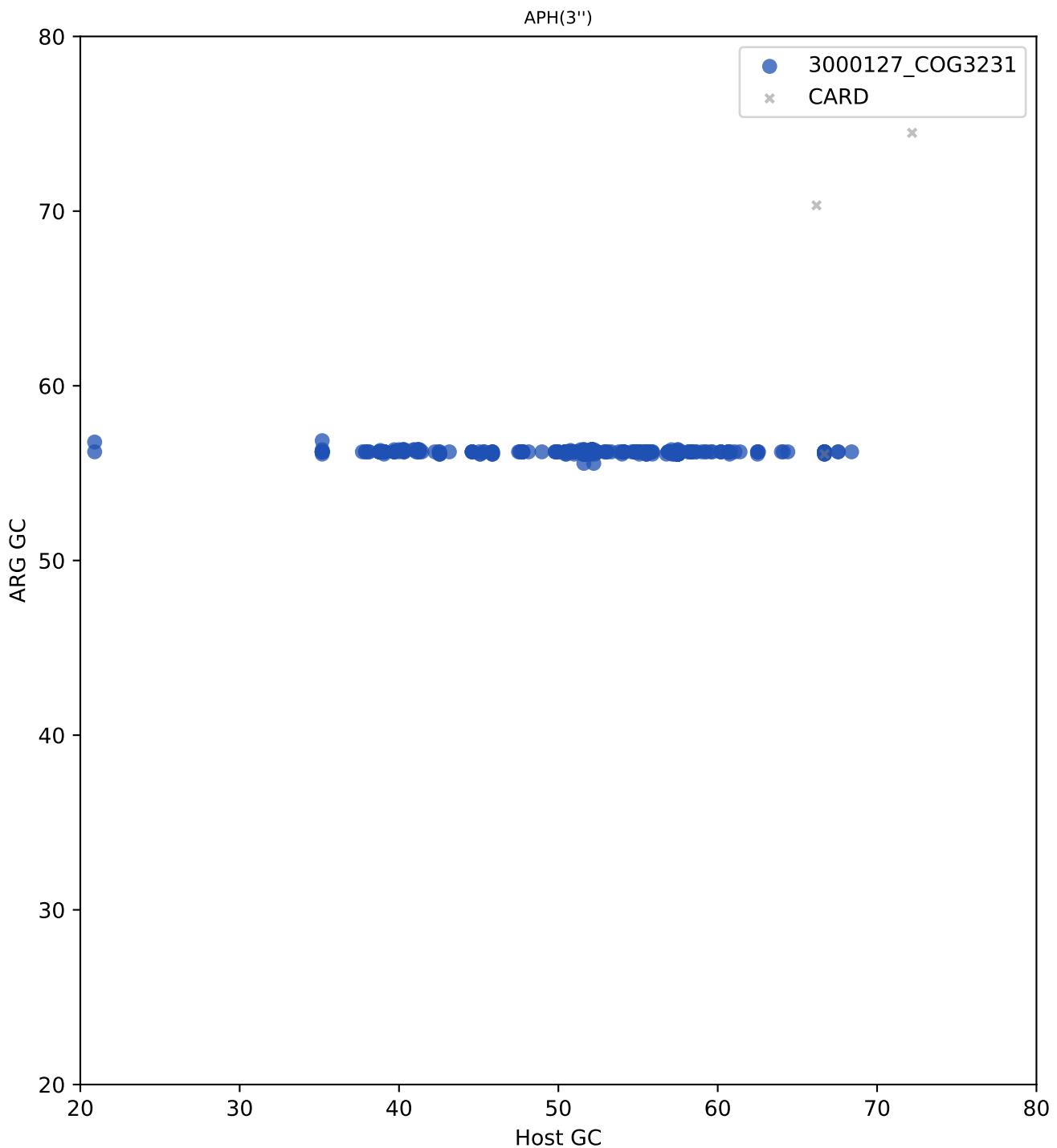
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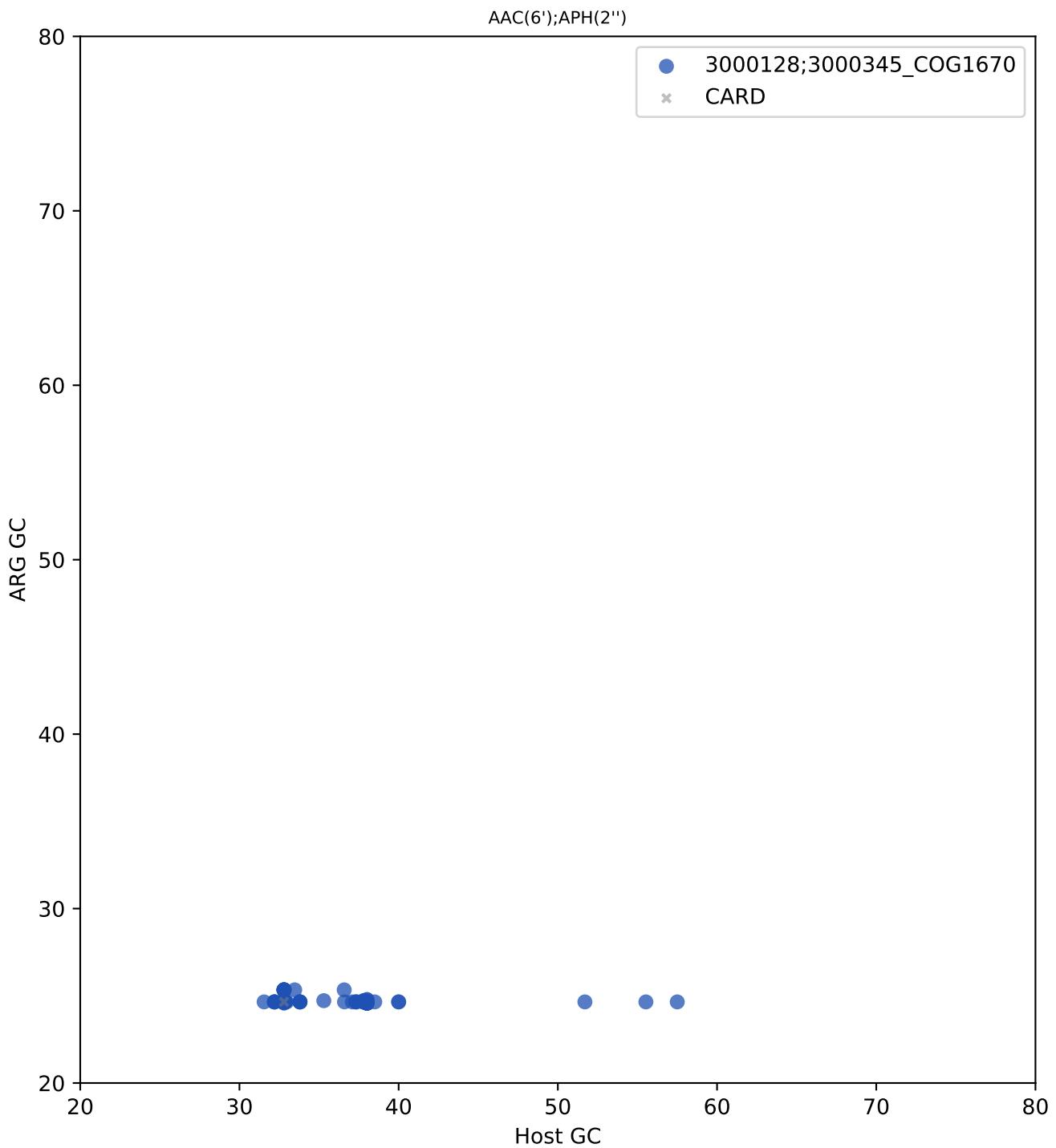
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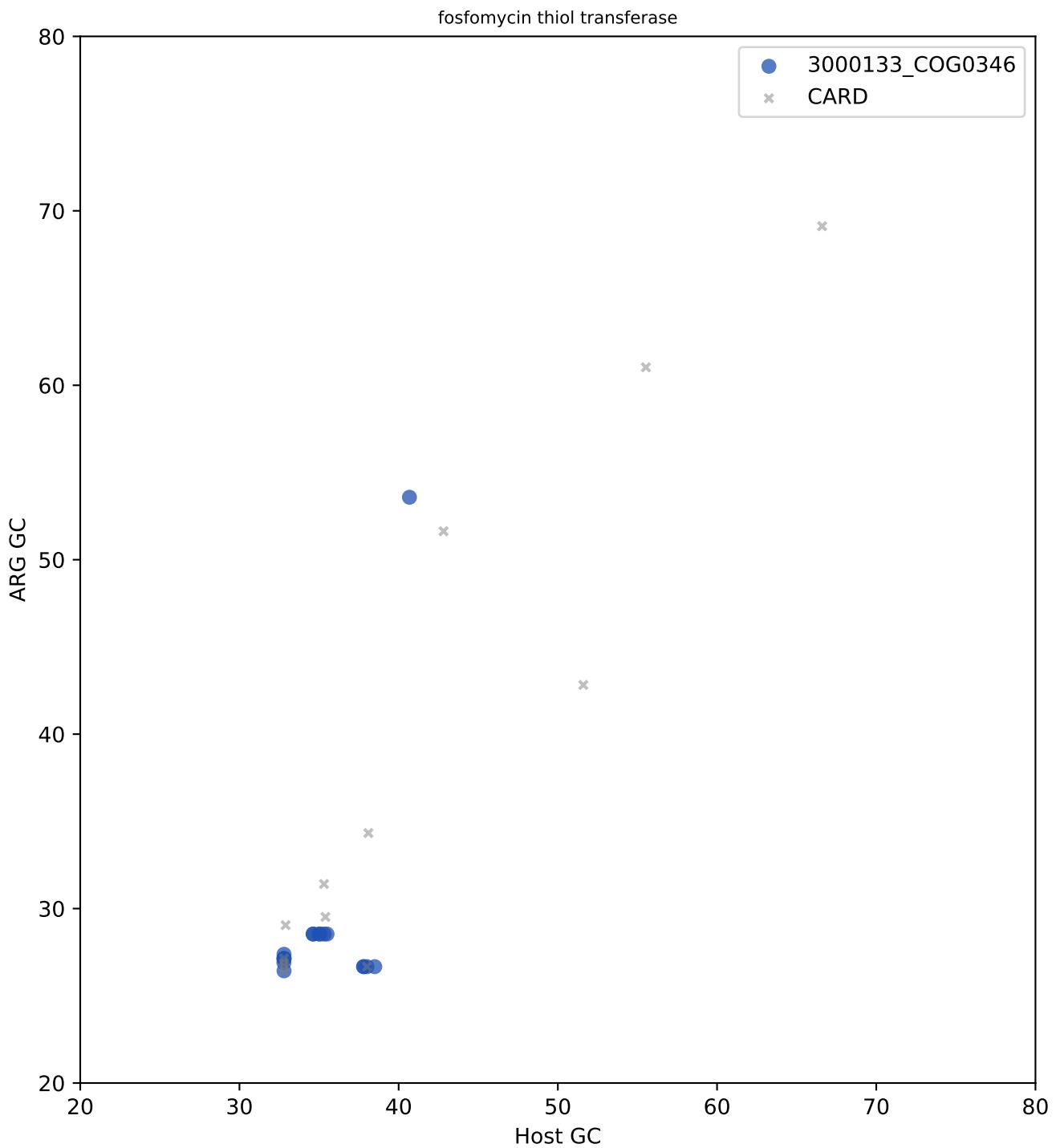
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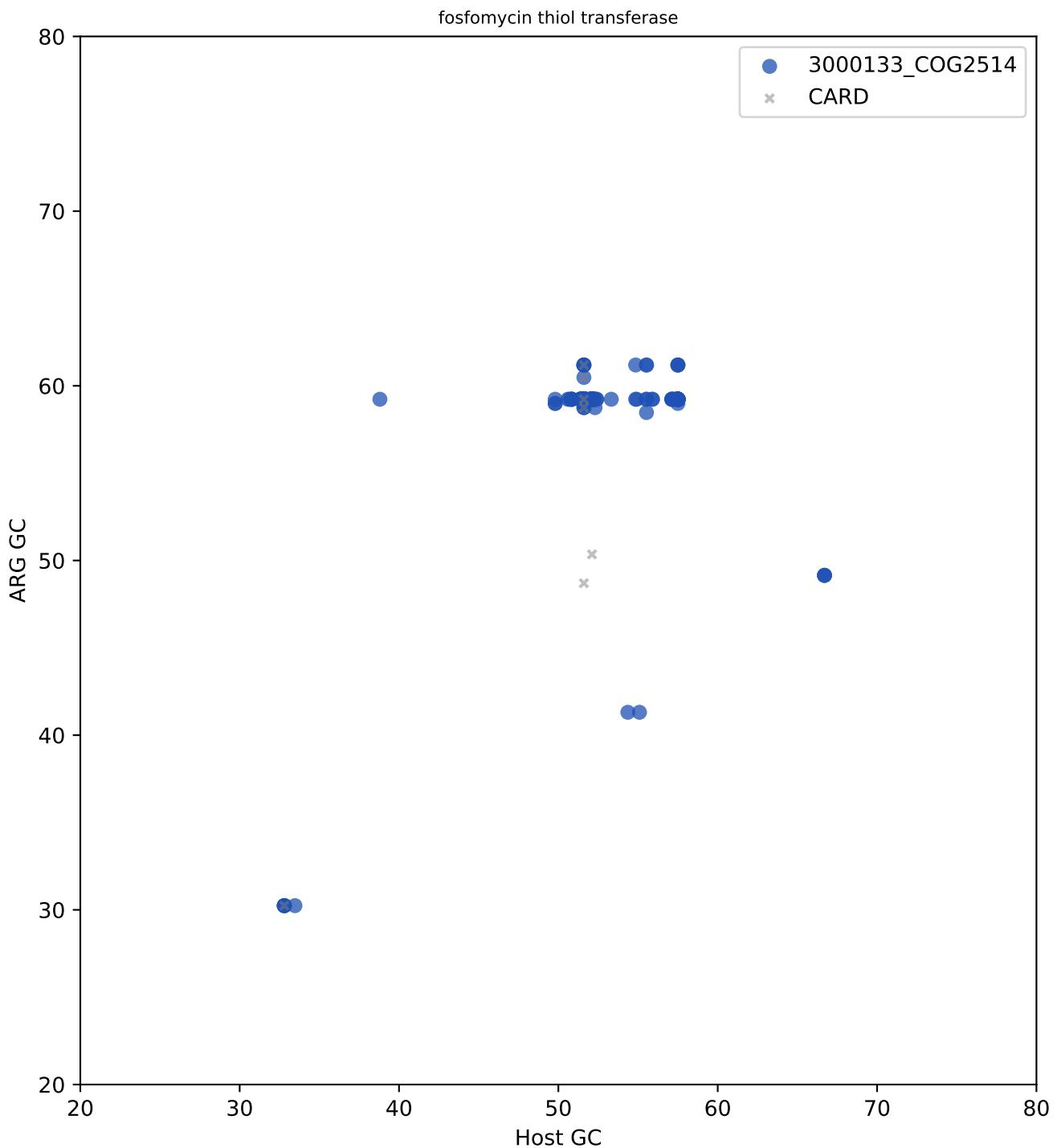
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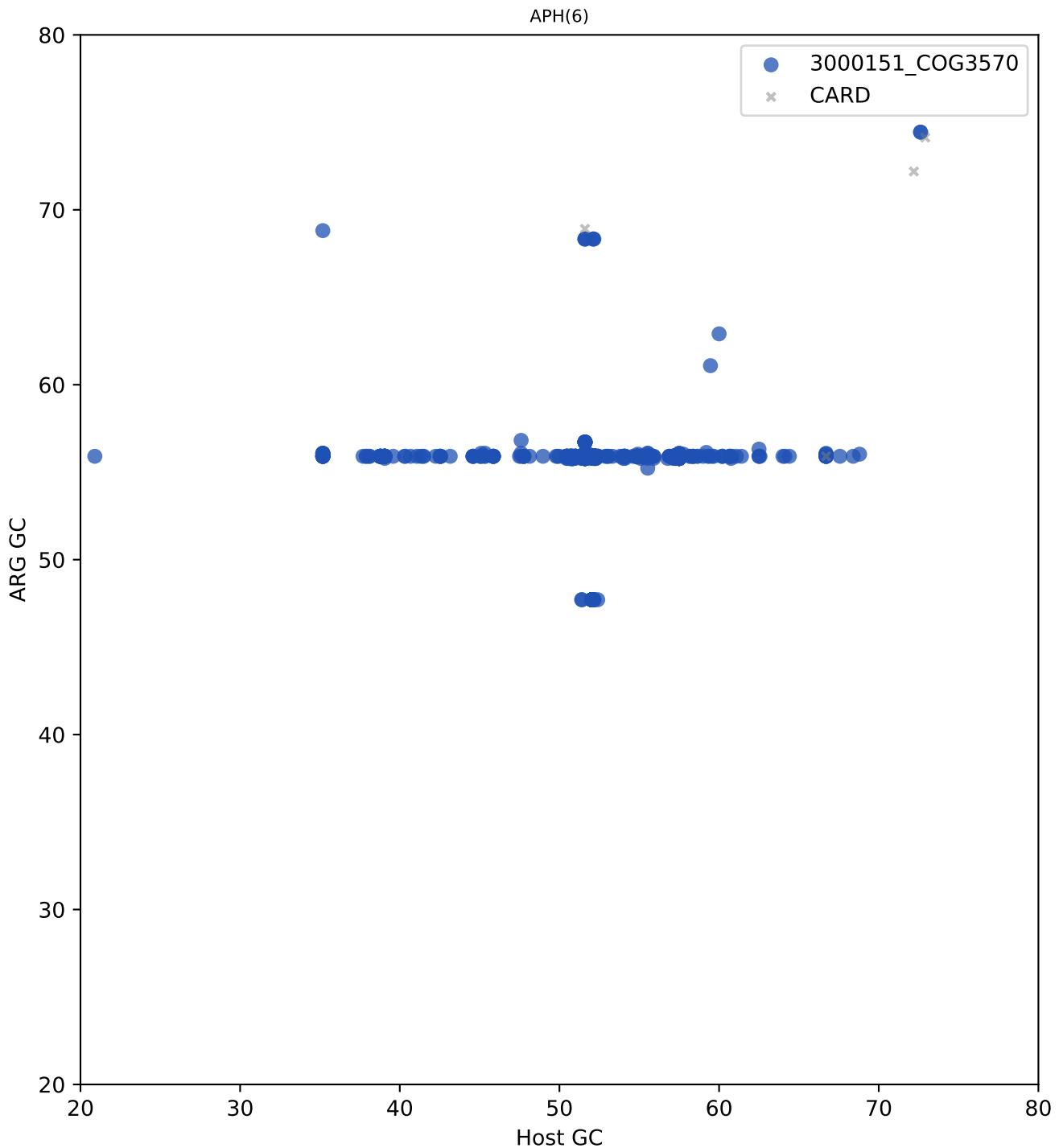
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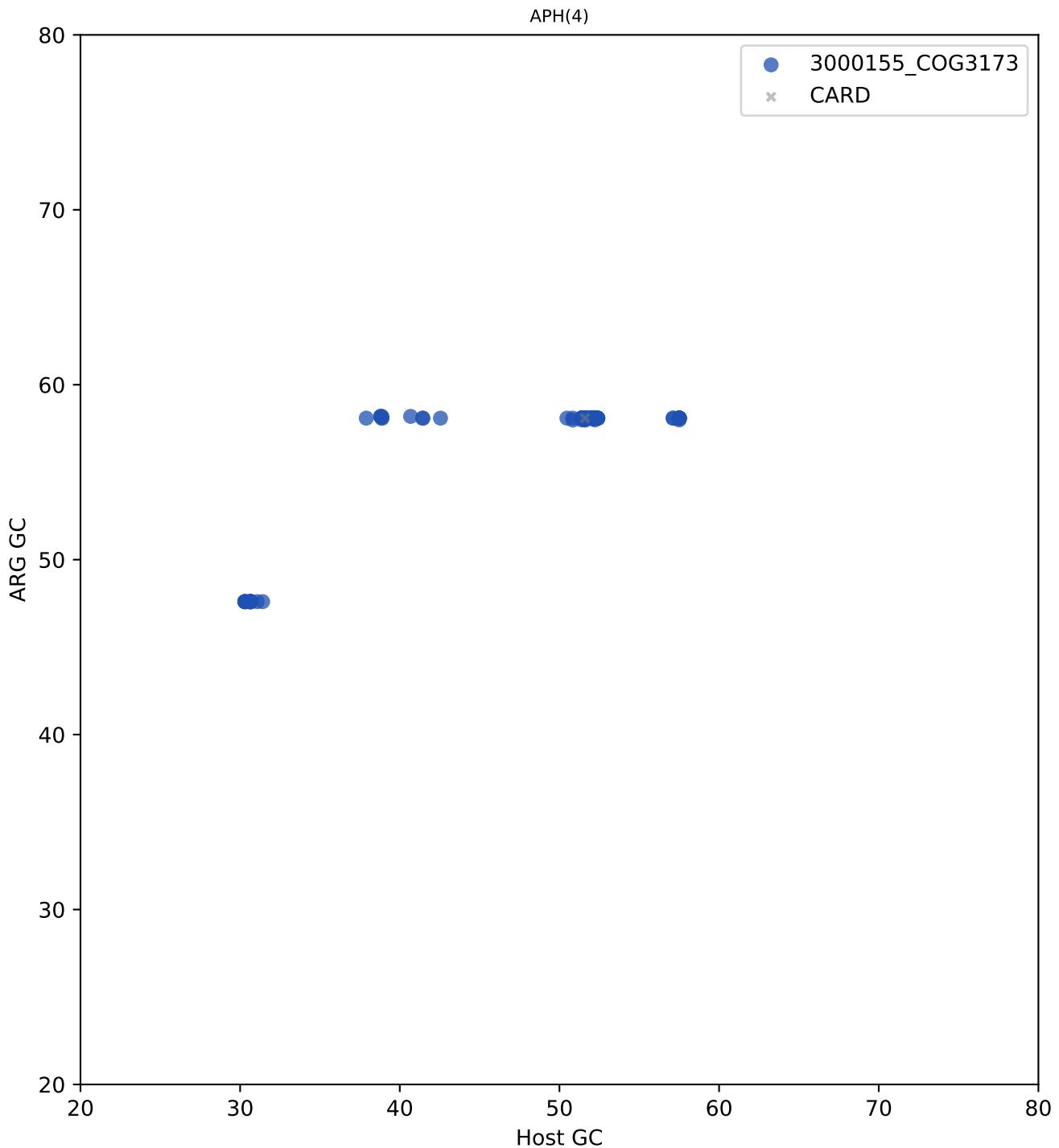
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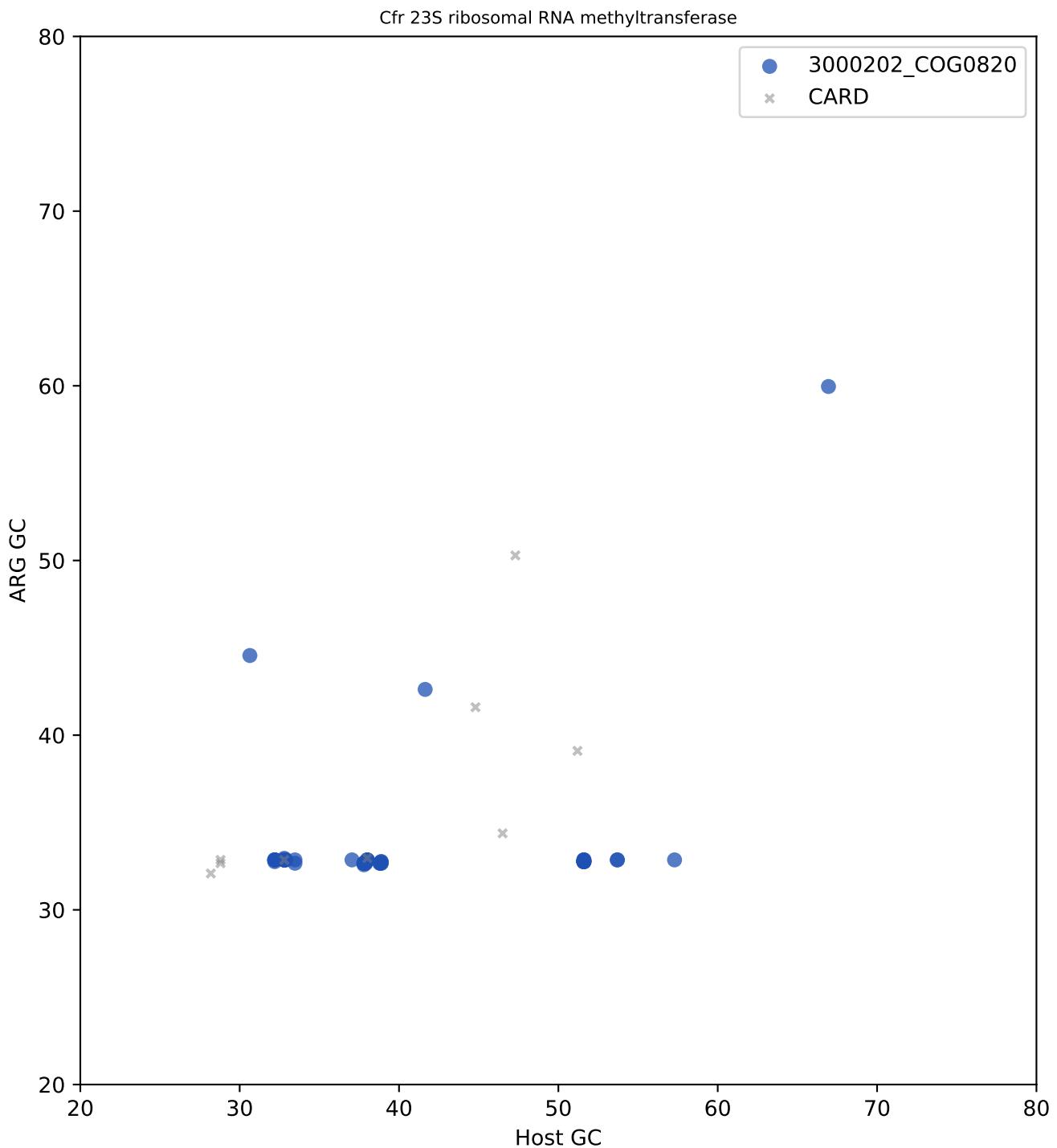
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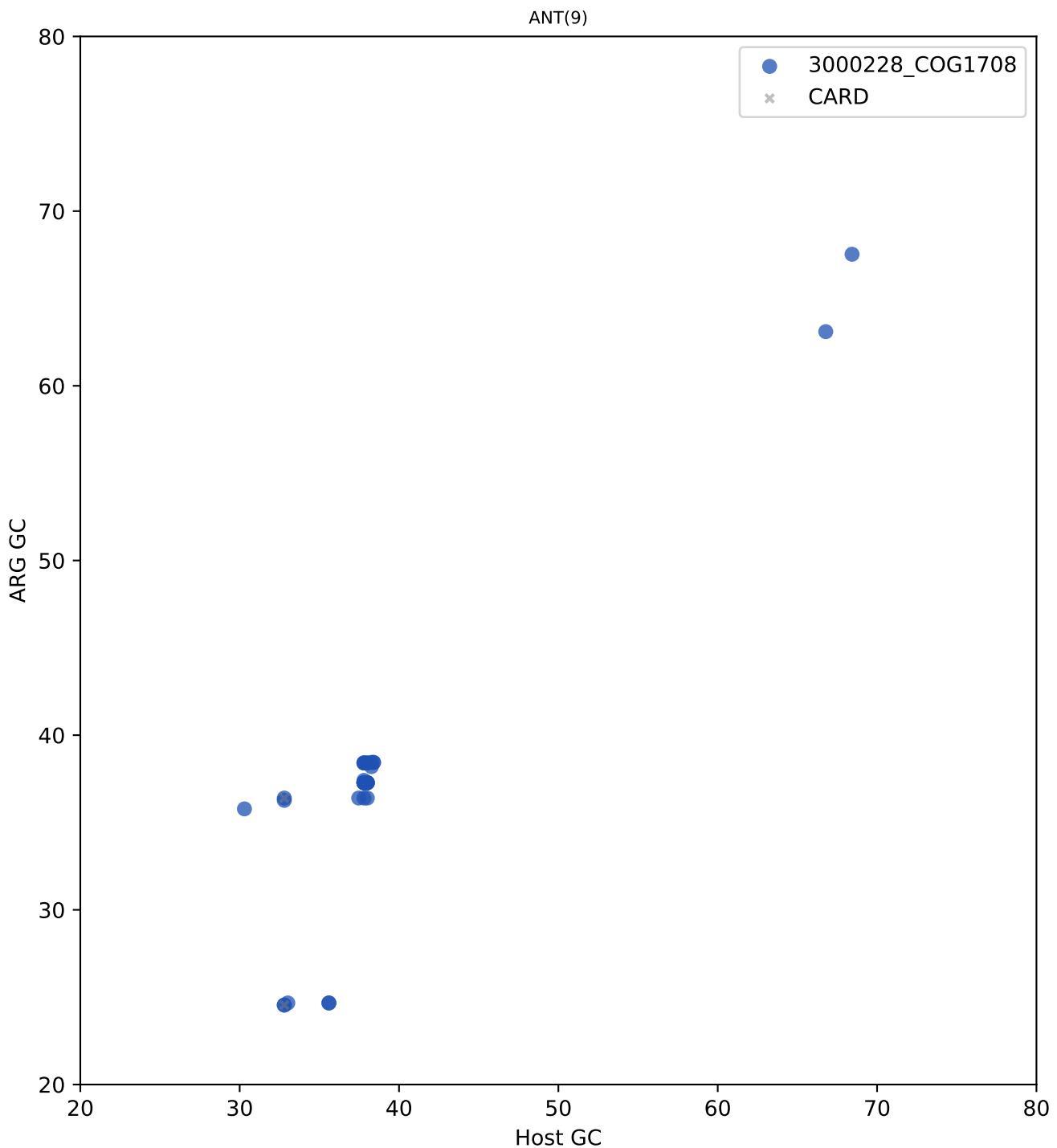
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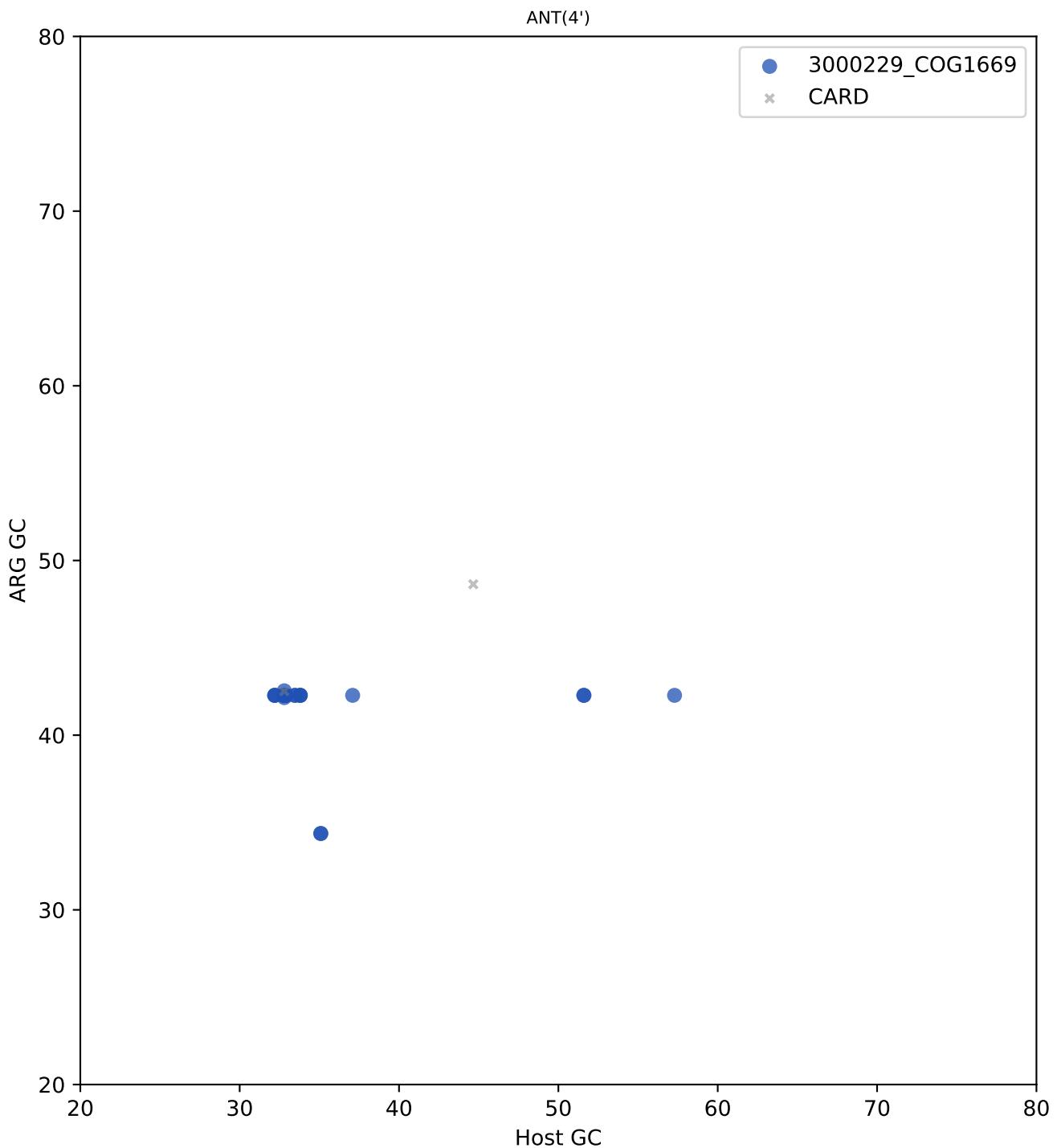
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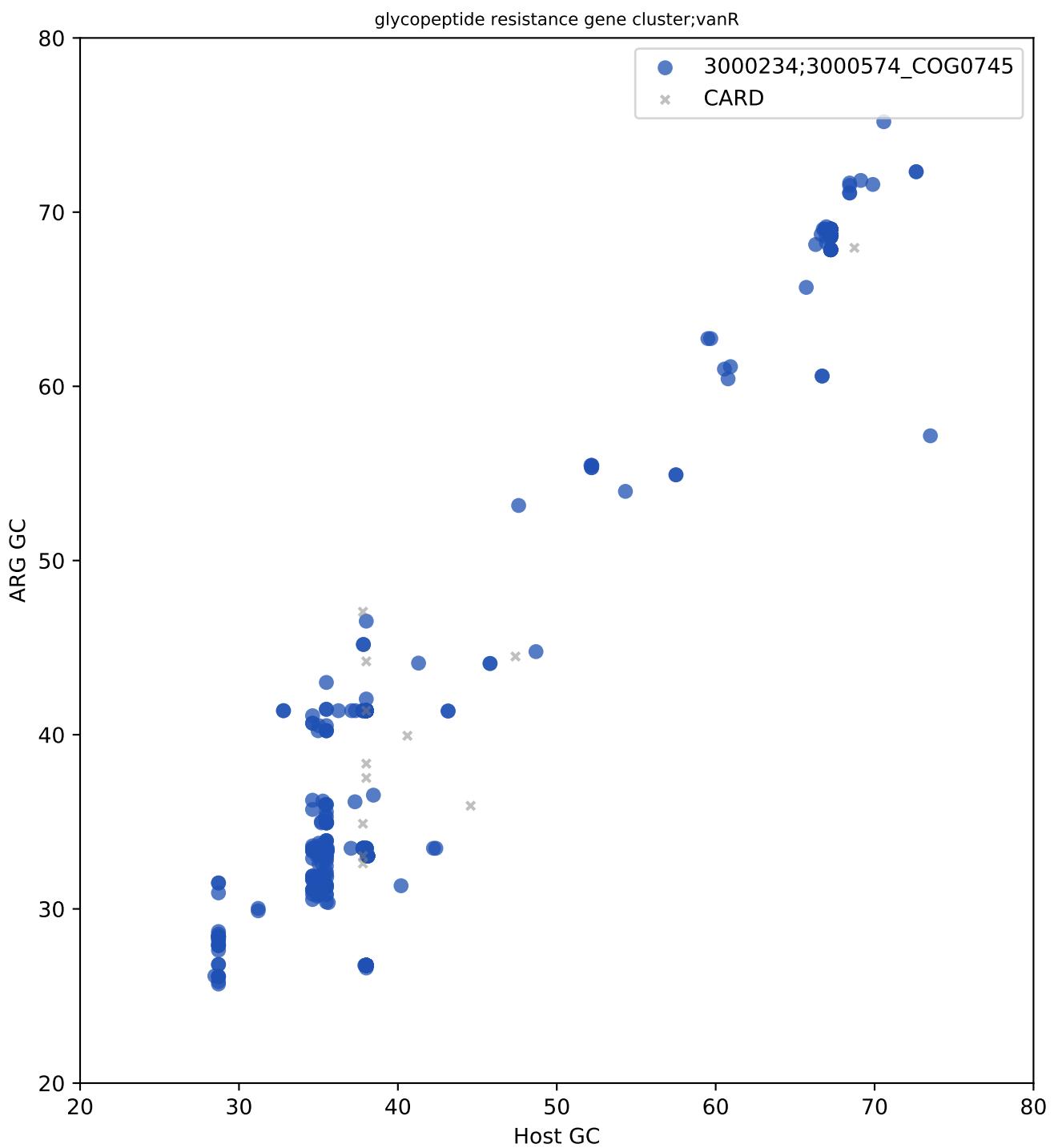
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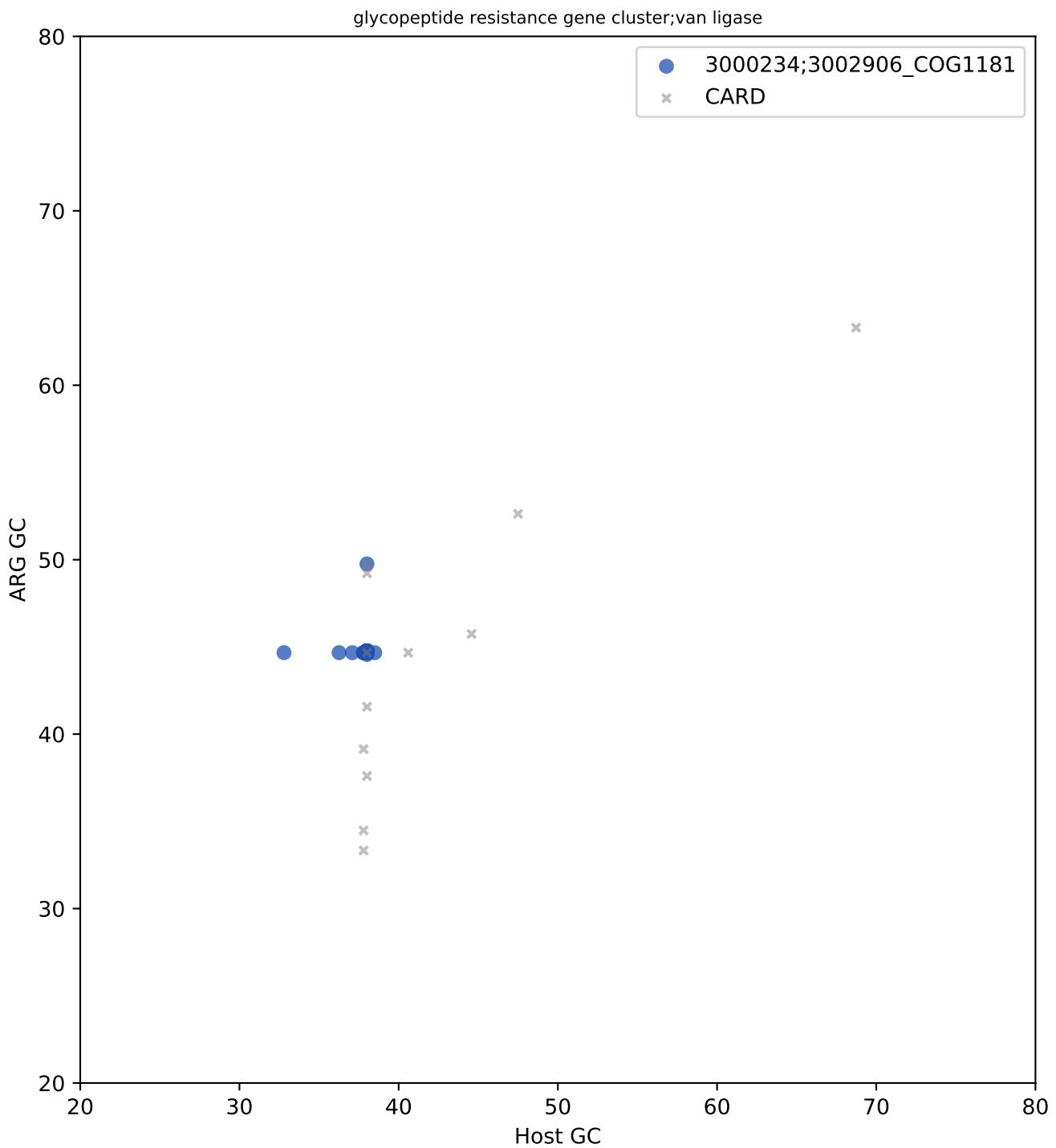
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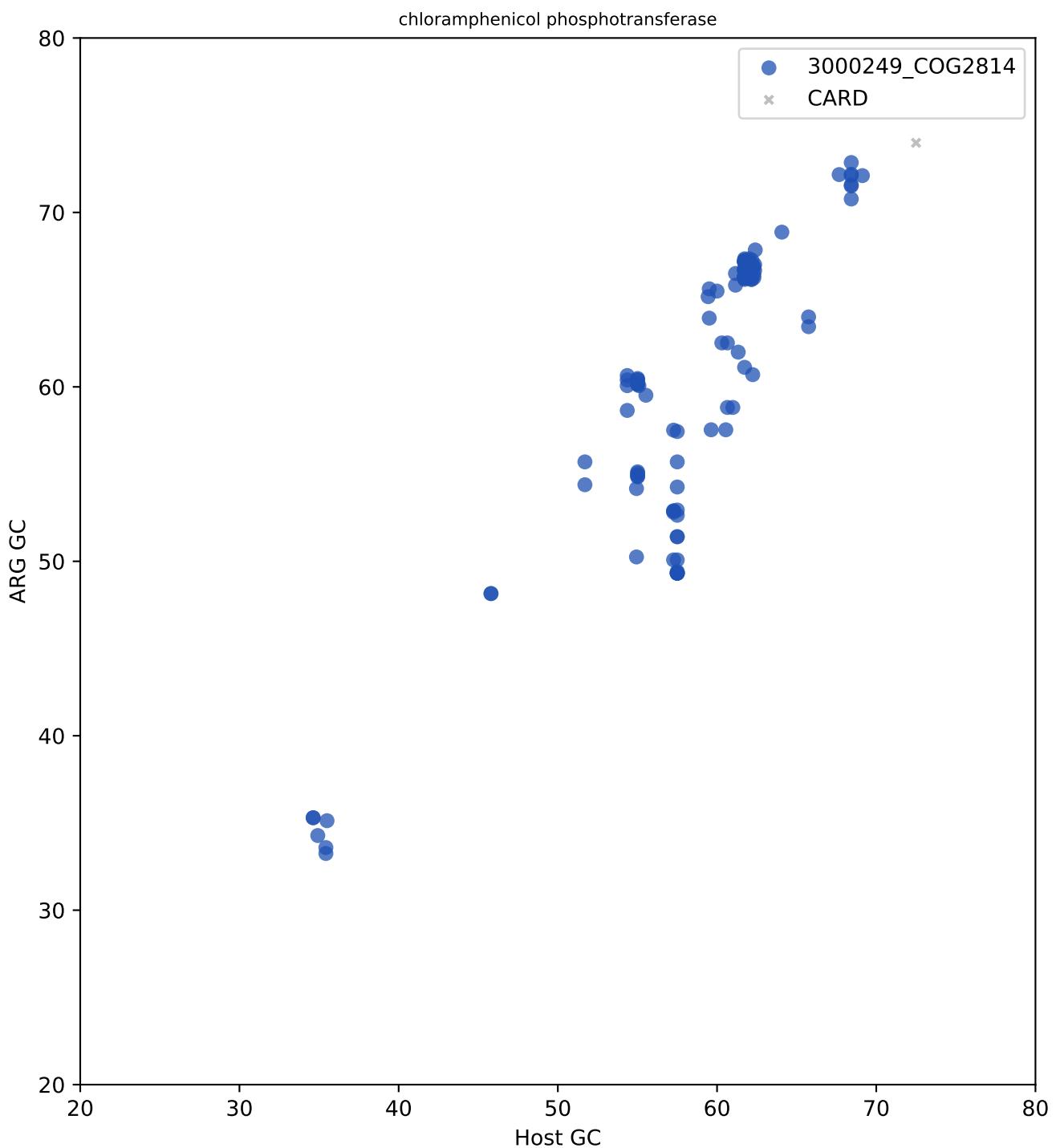
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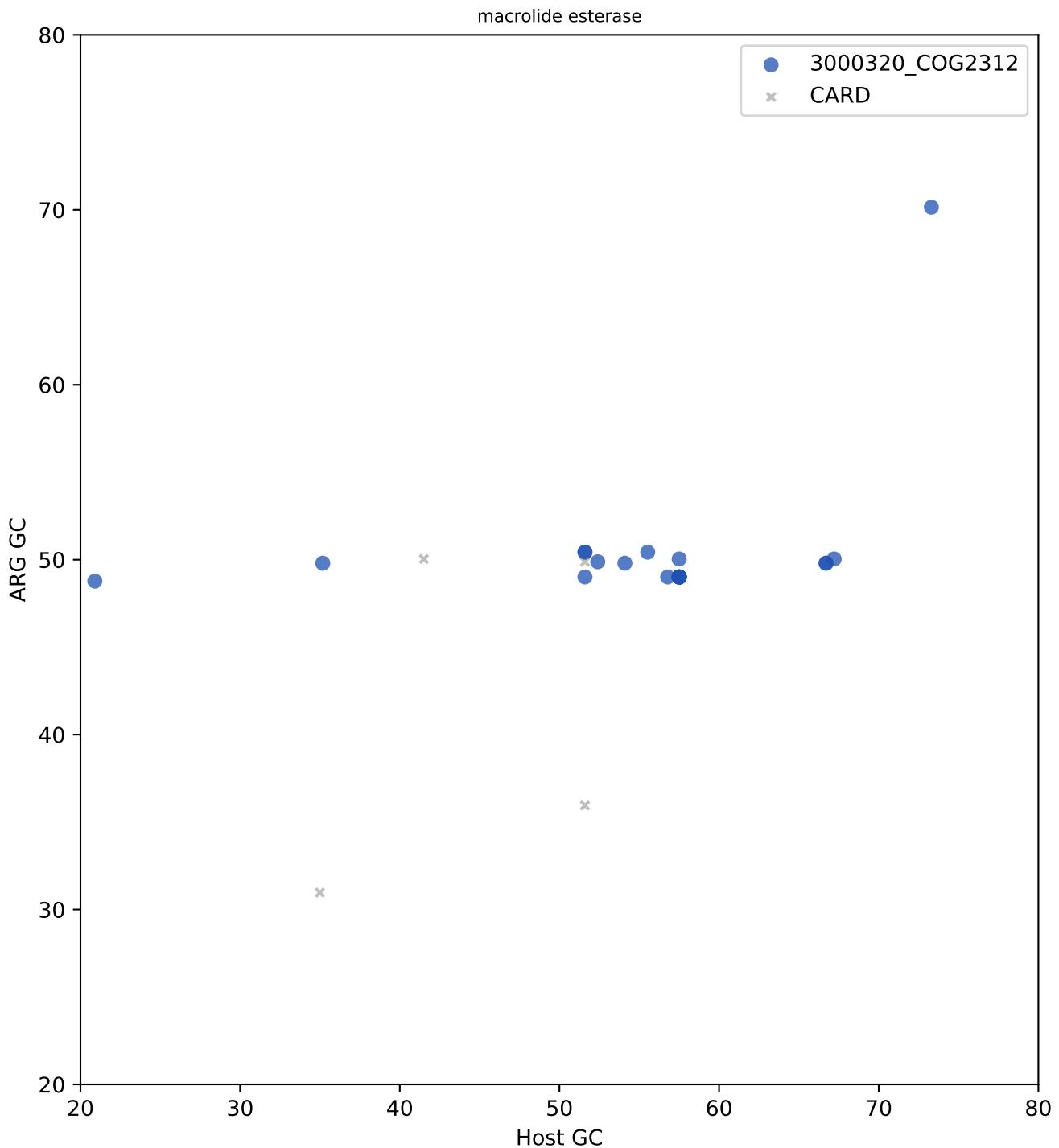
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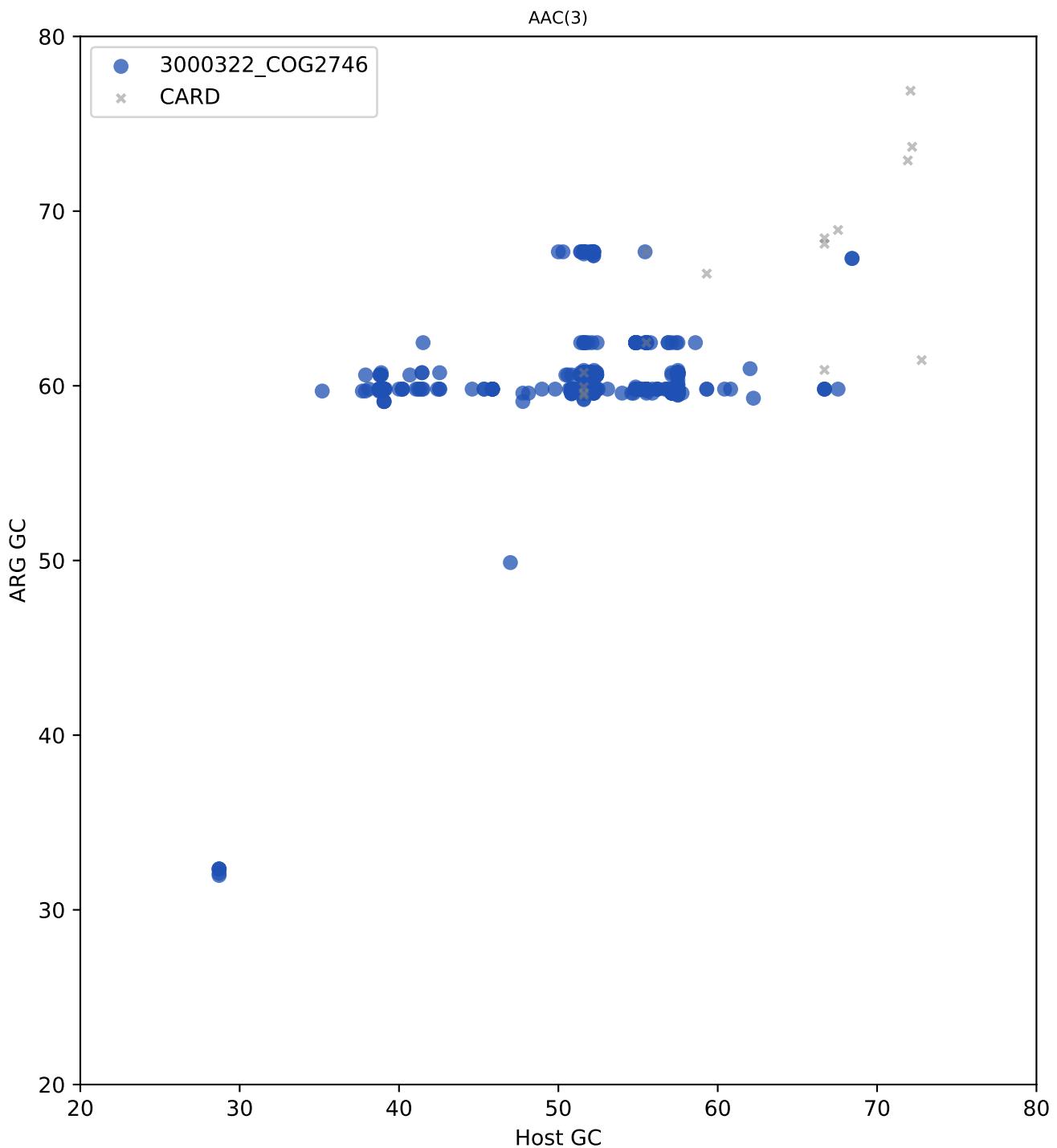
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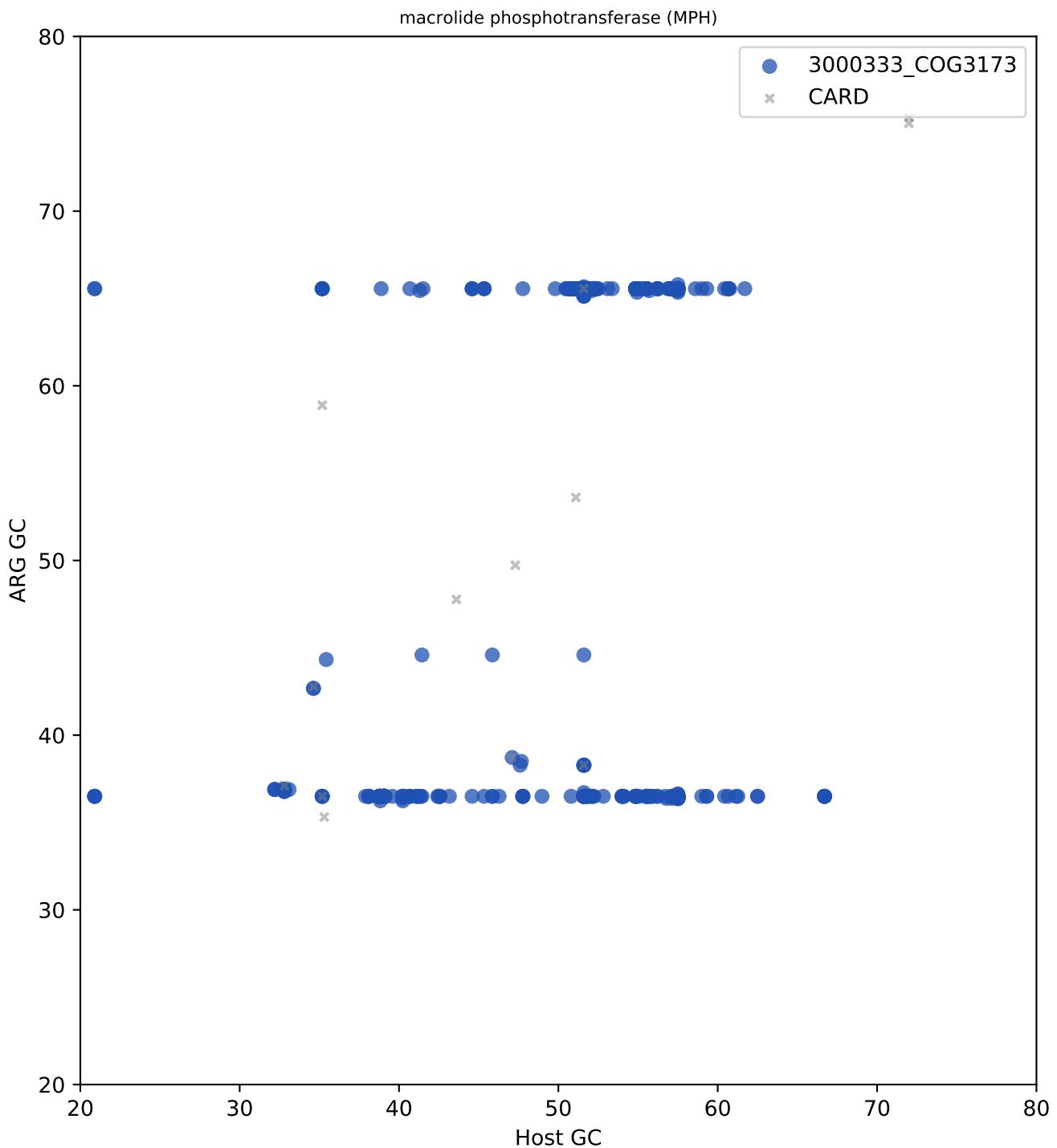
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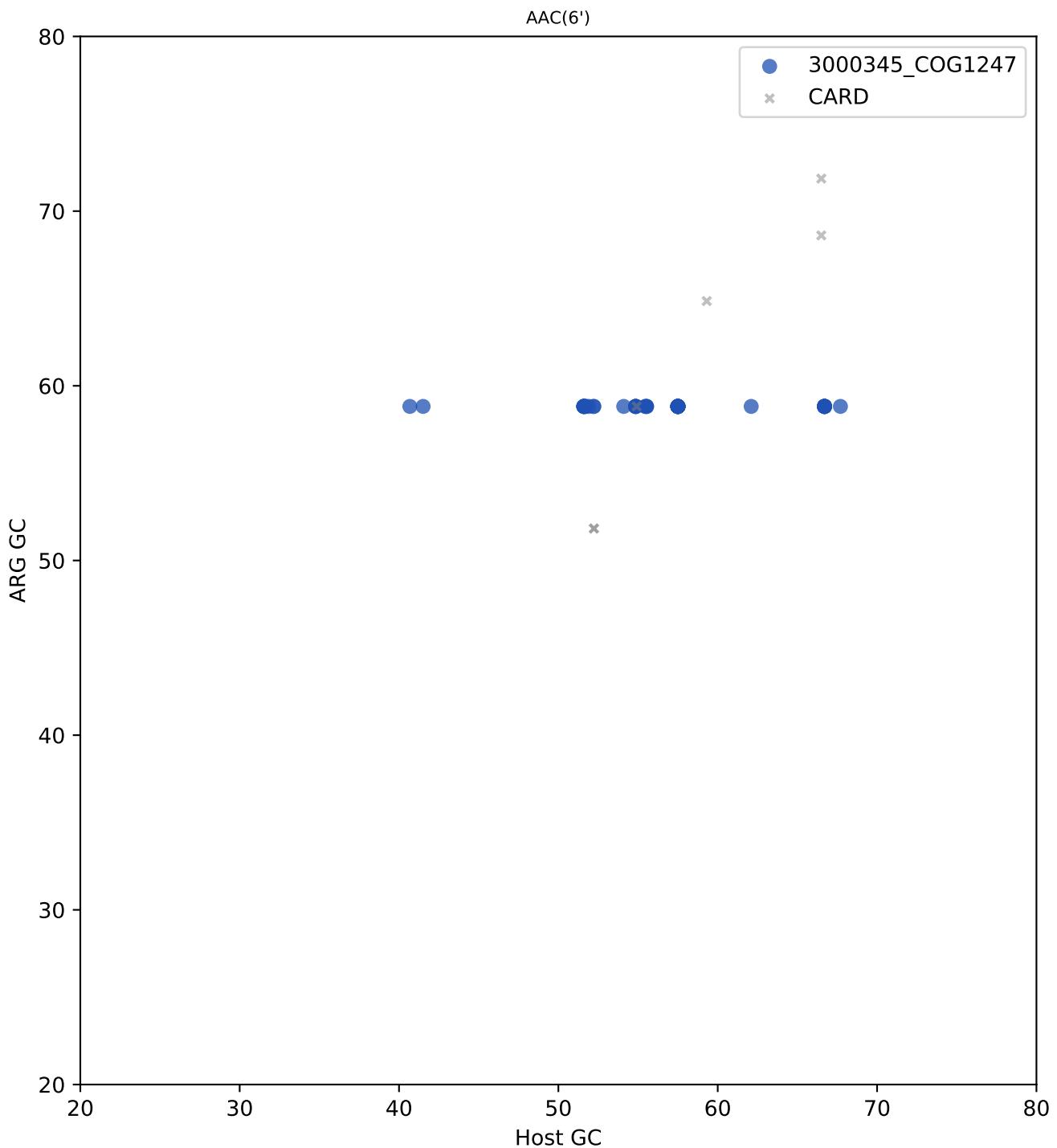
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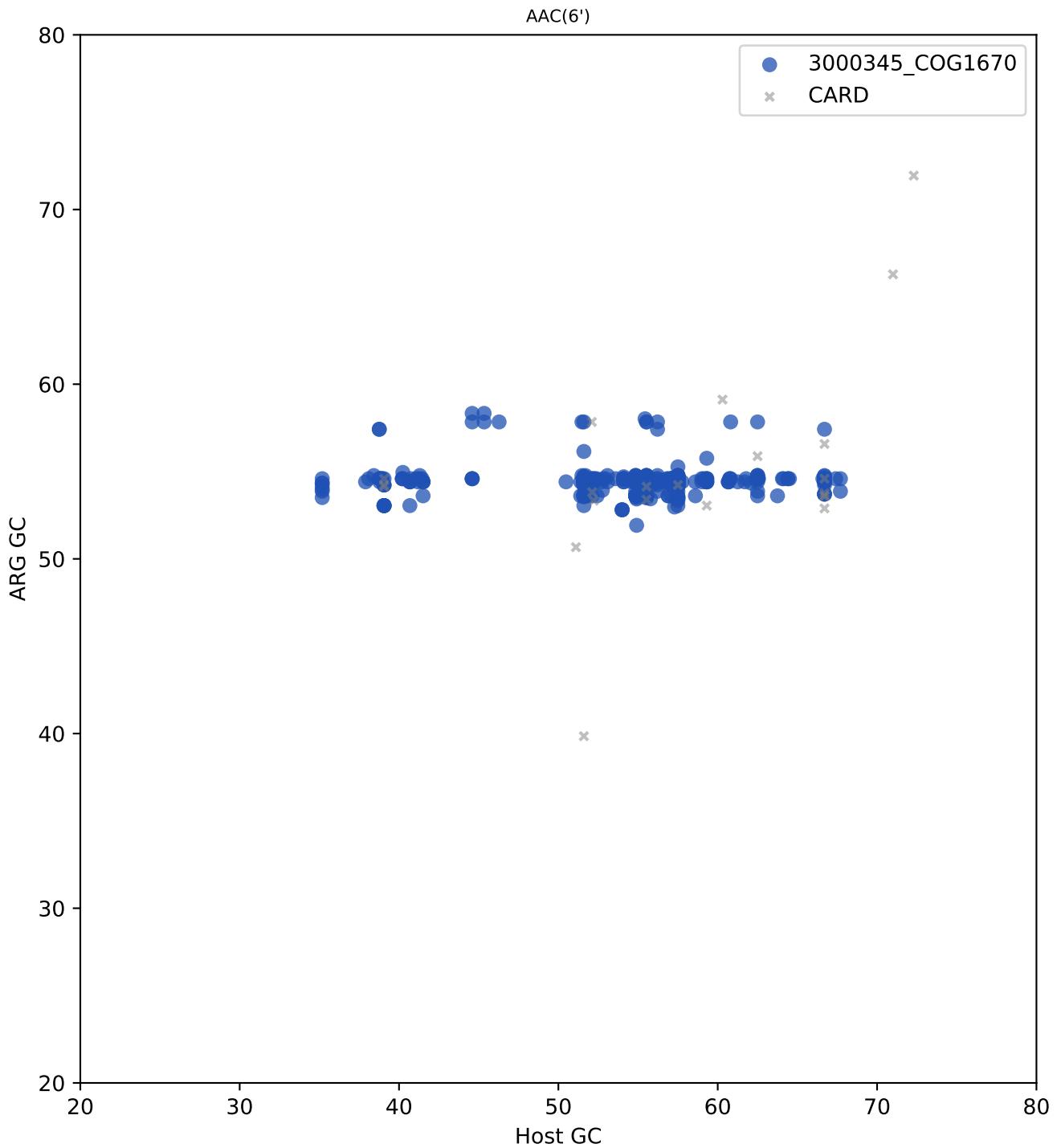
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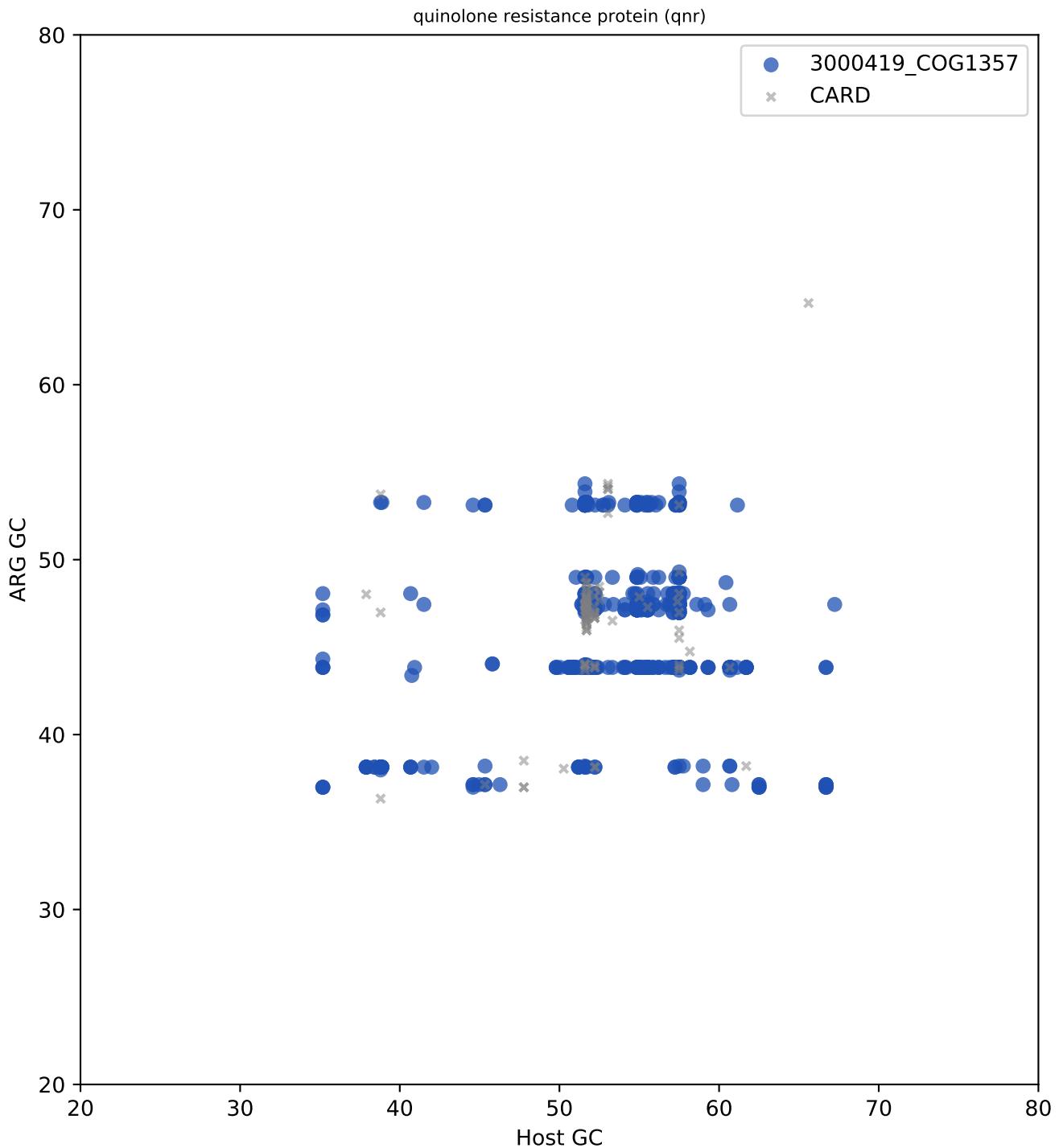
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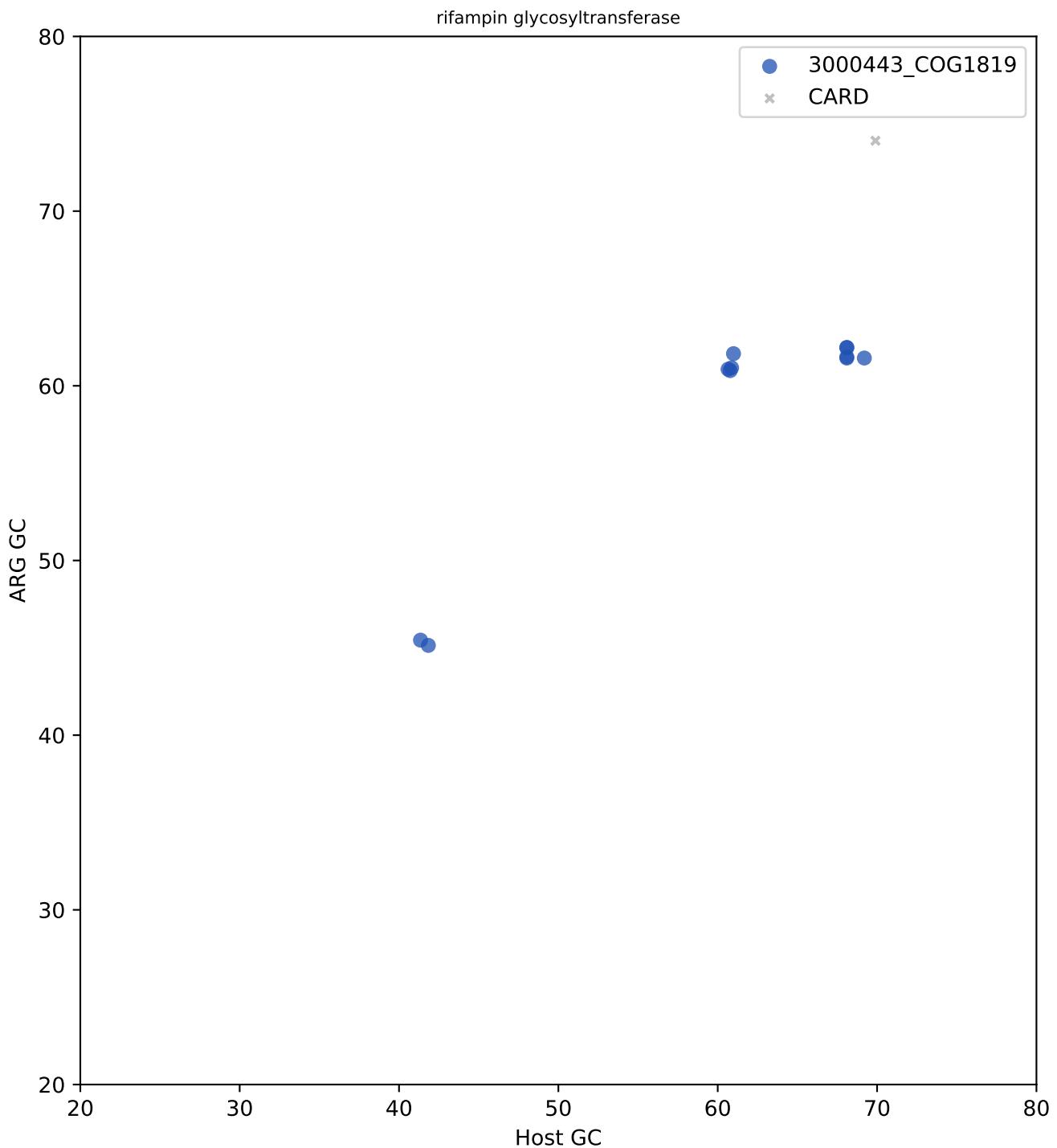
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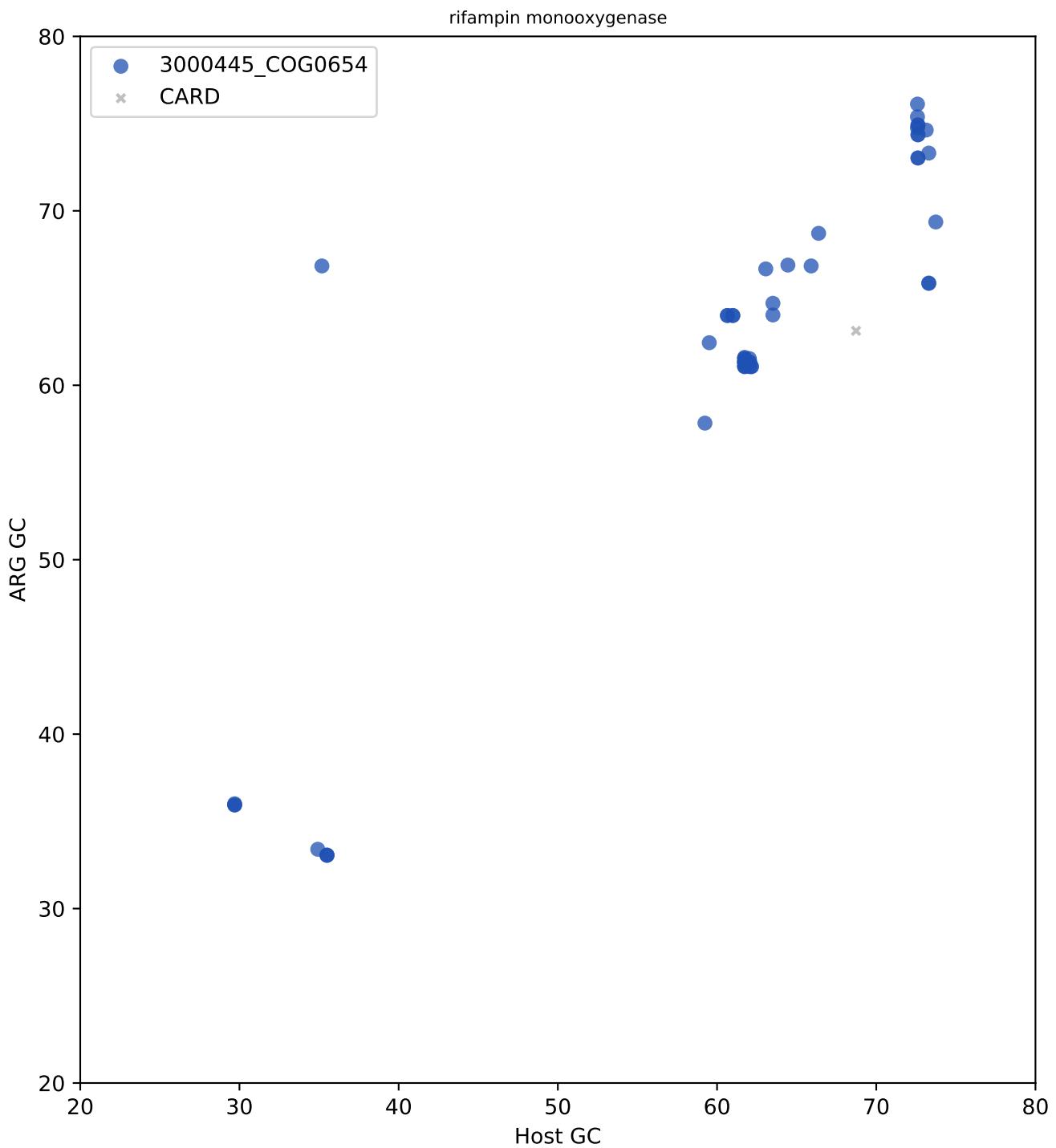
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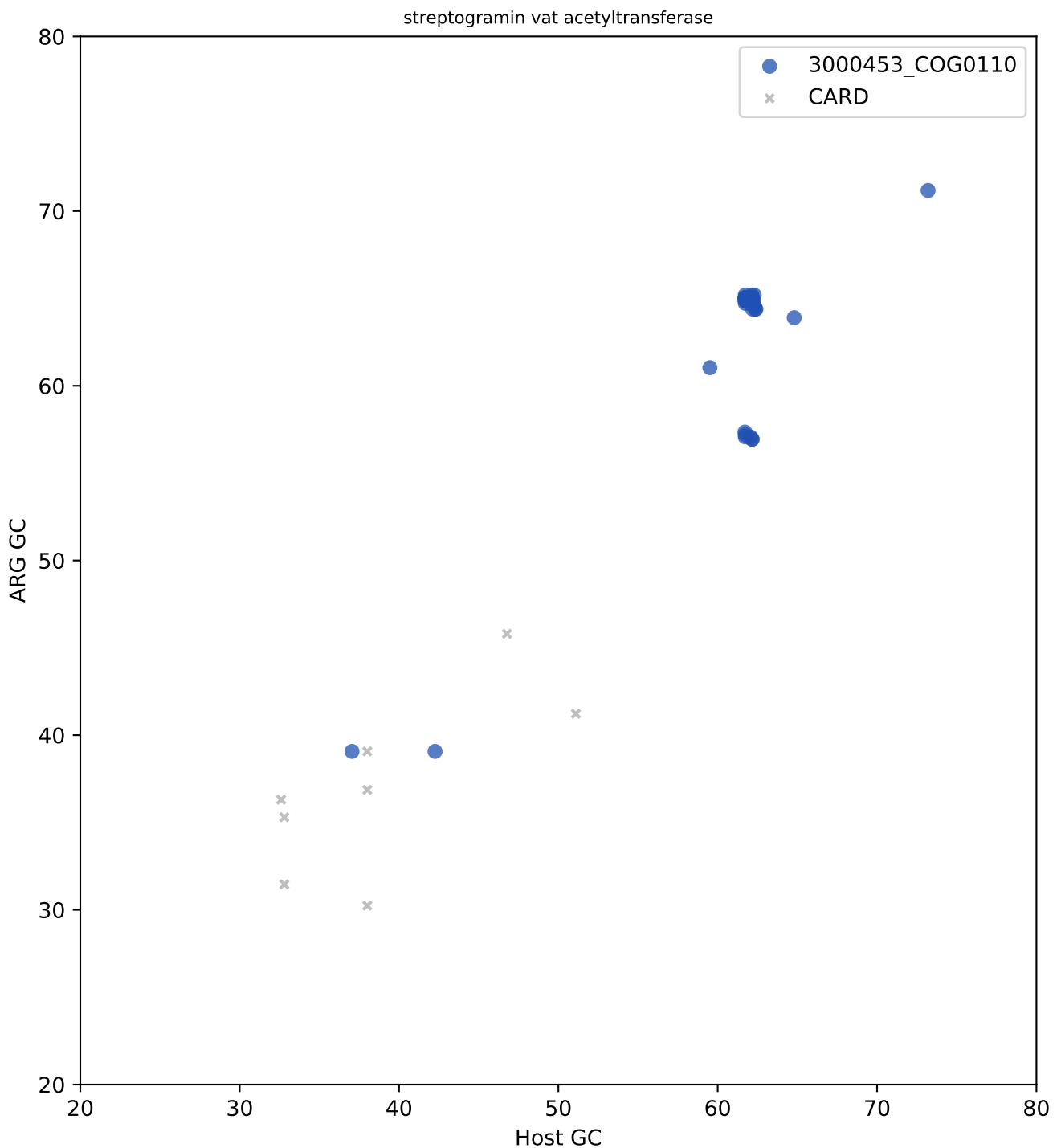
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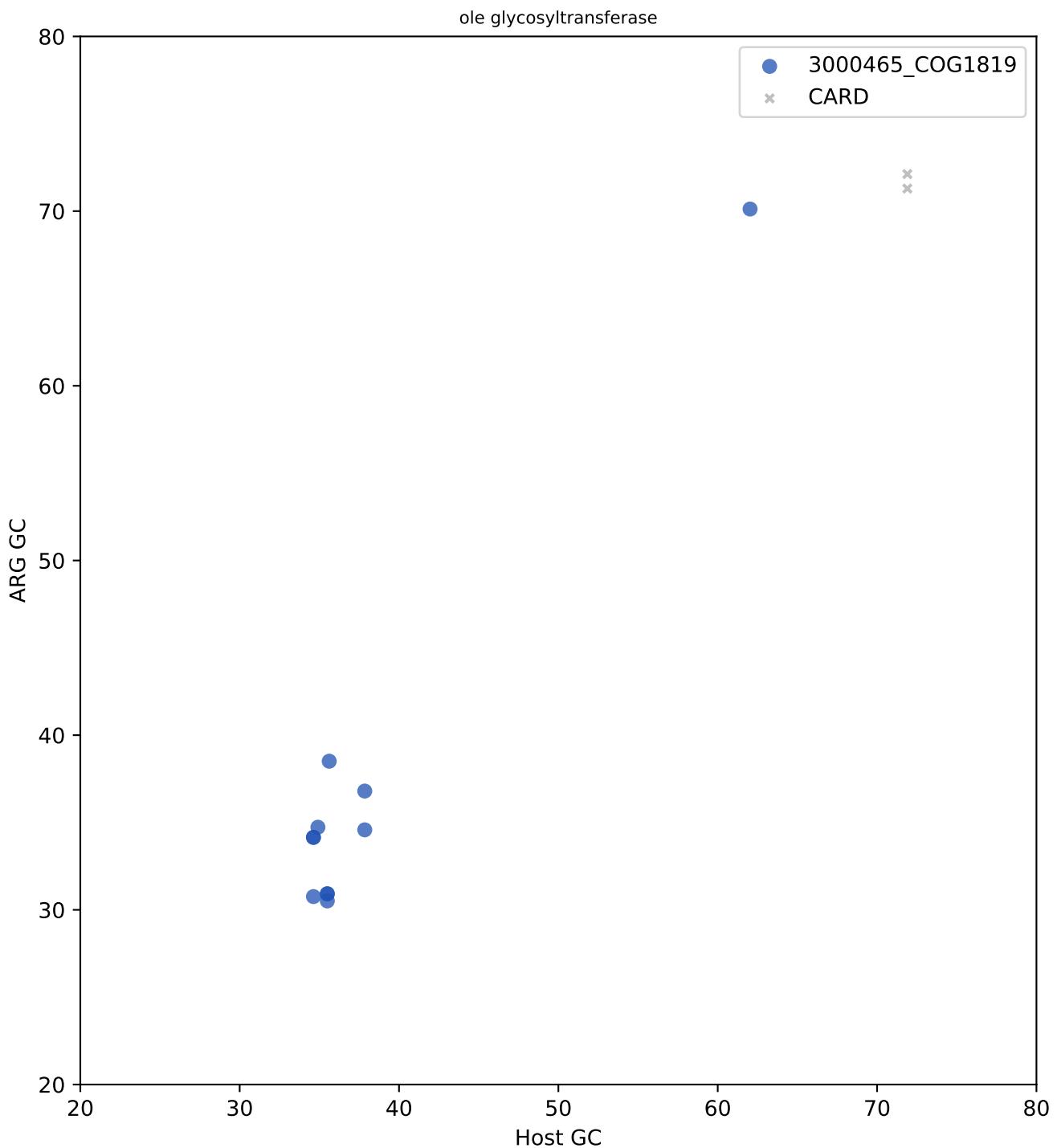
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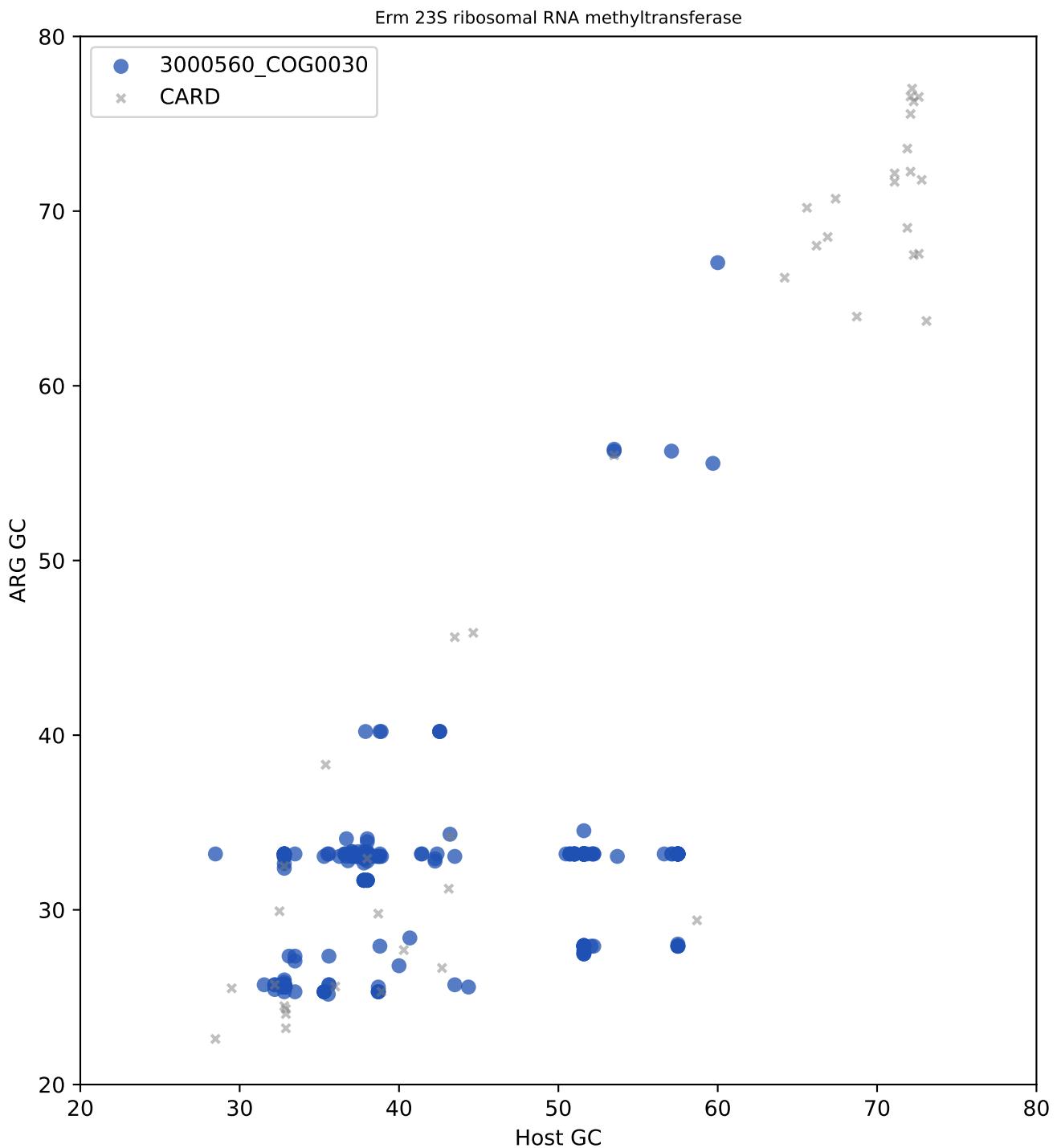
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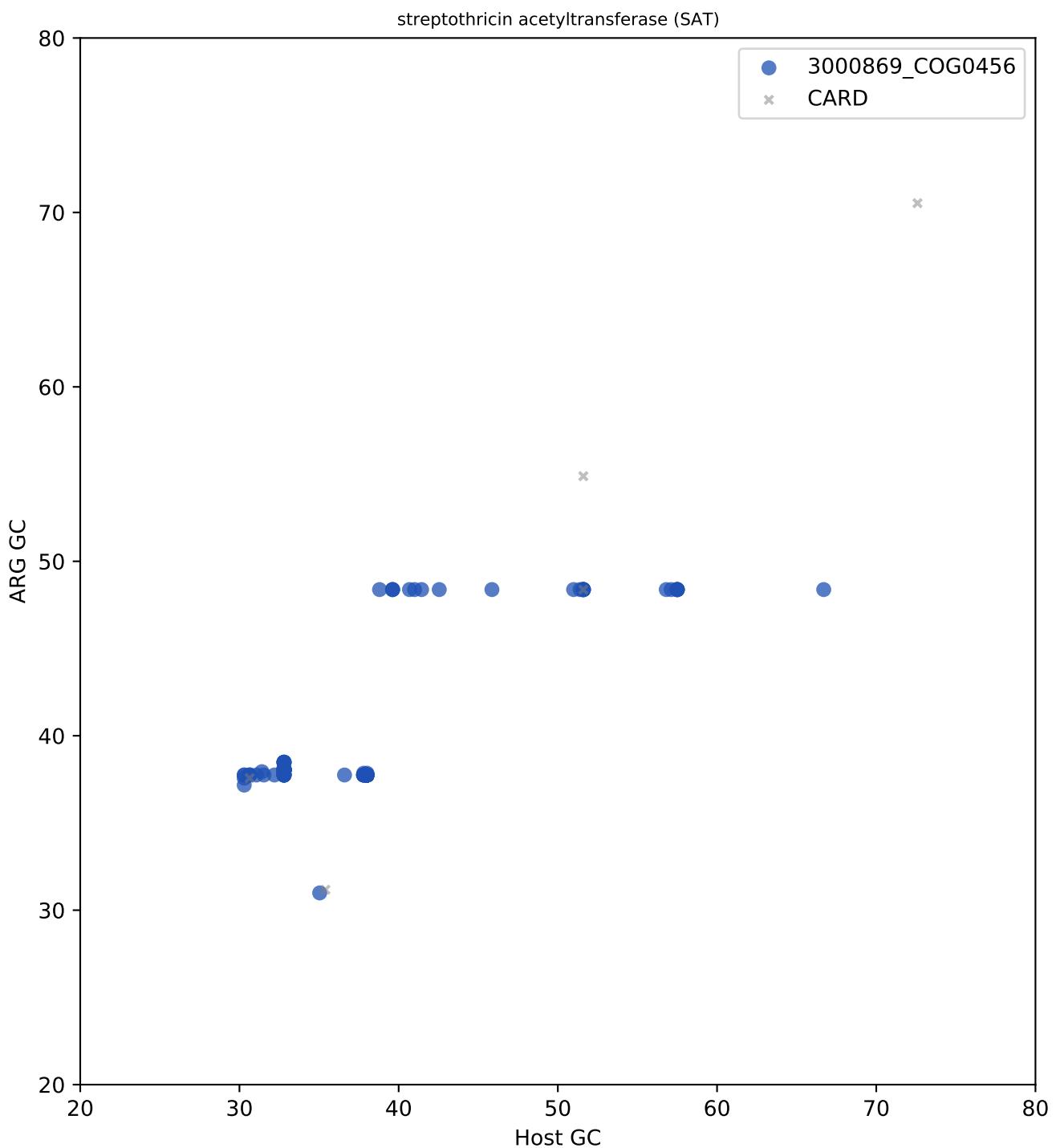
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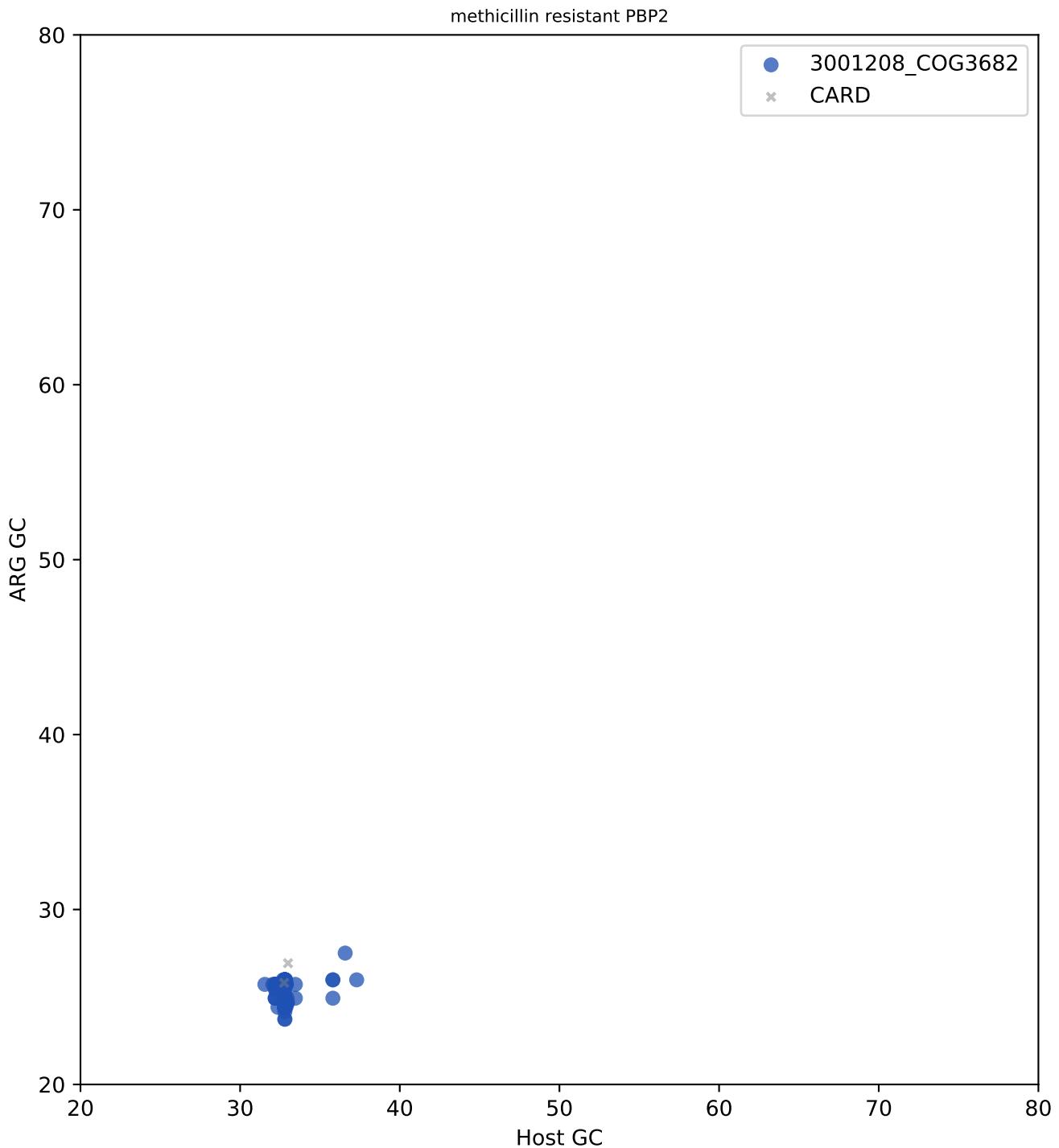
Supplementary Figure S1: (continued).



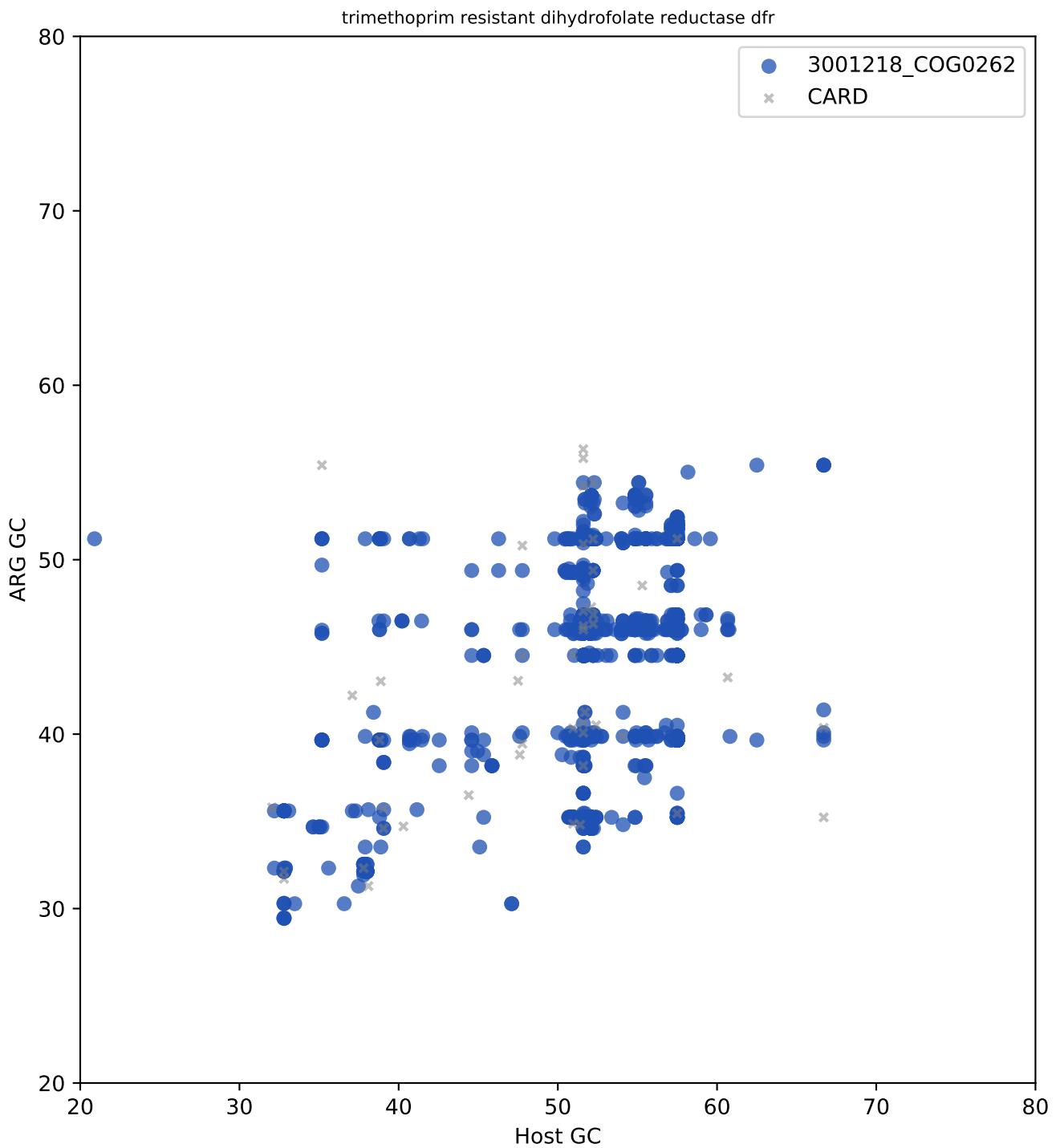
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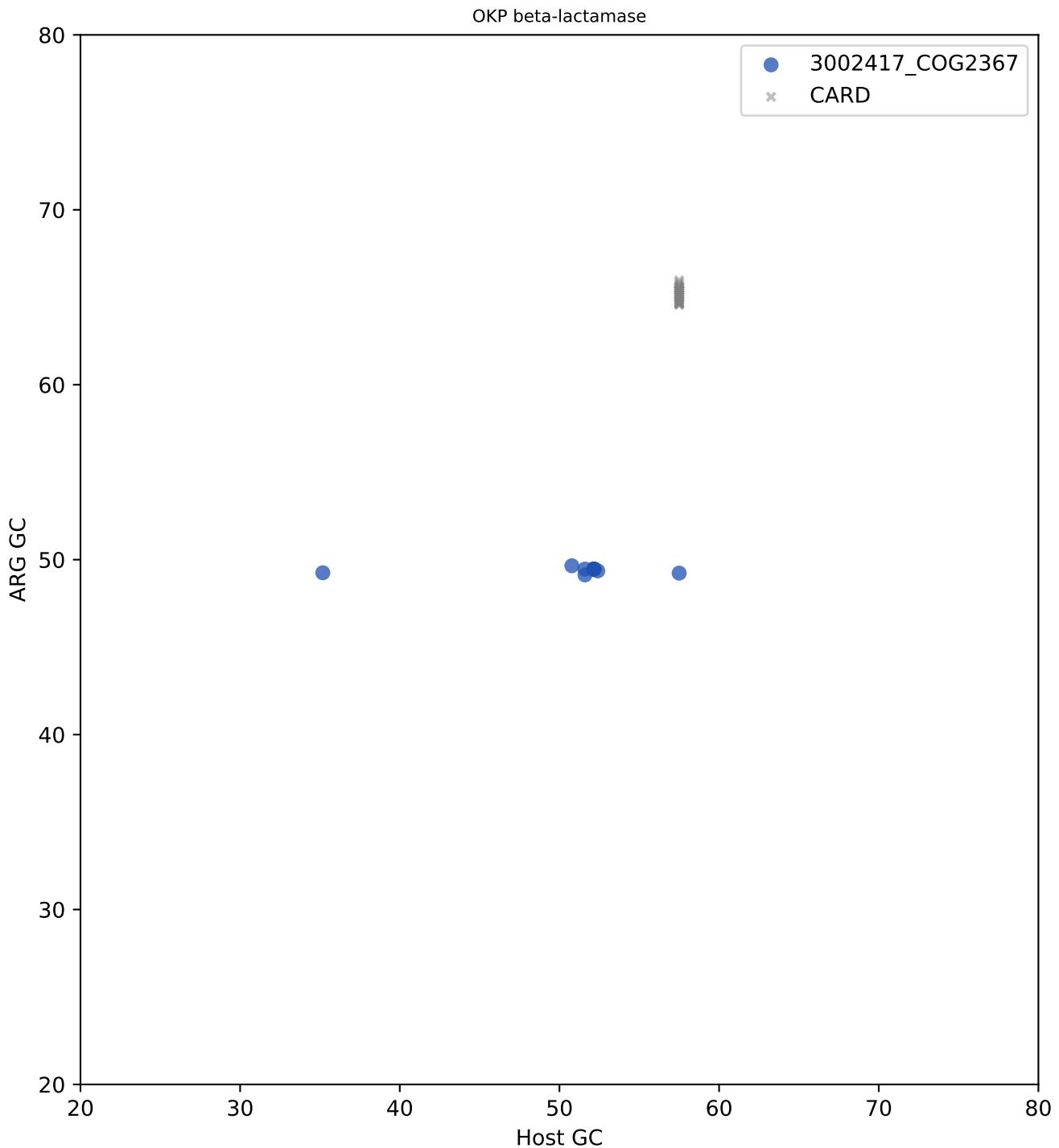
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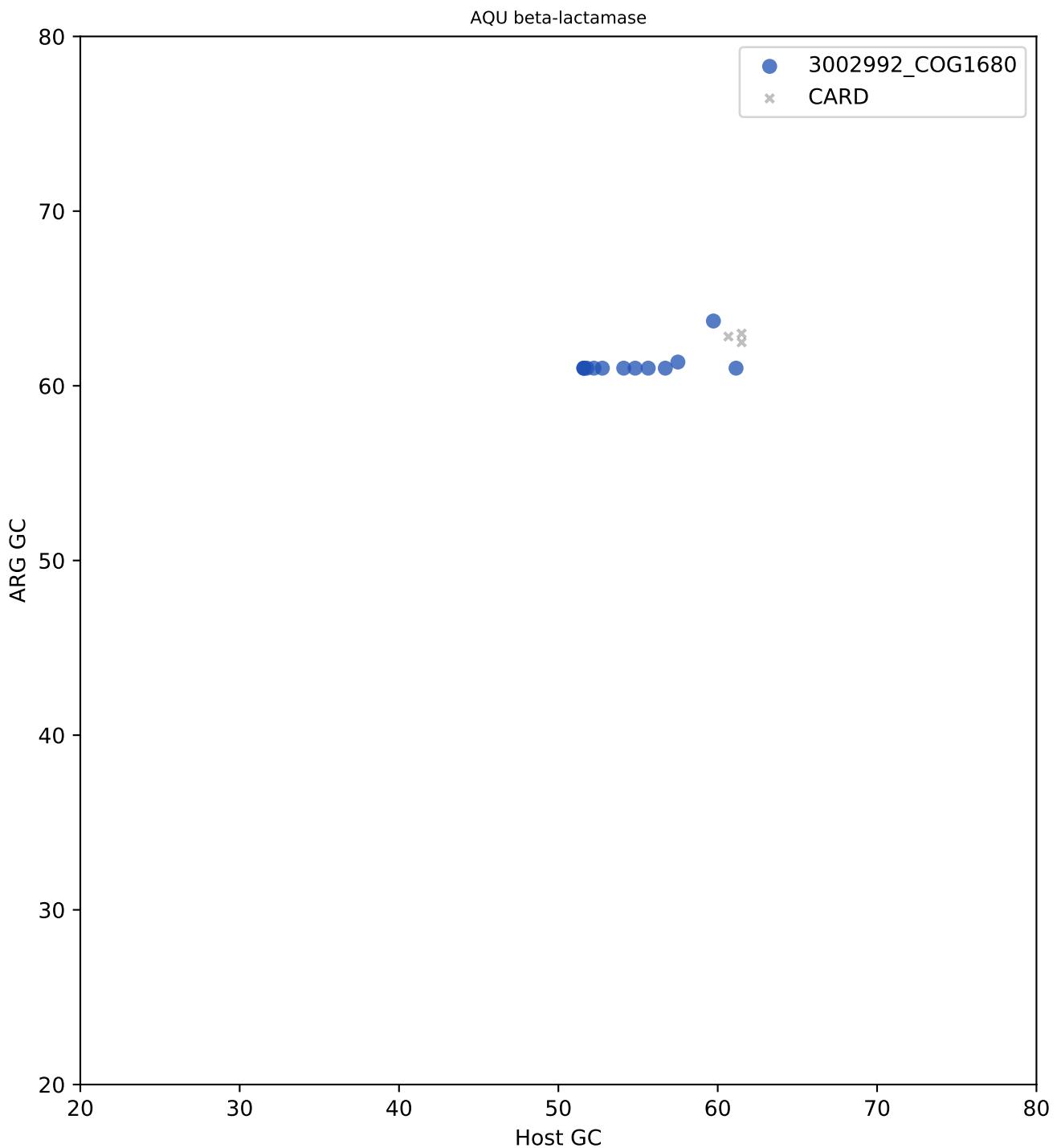
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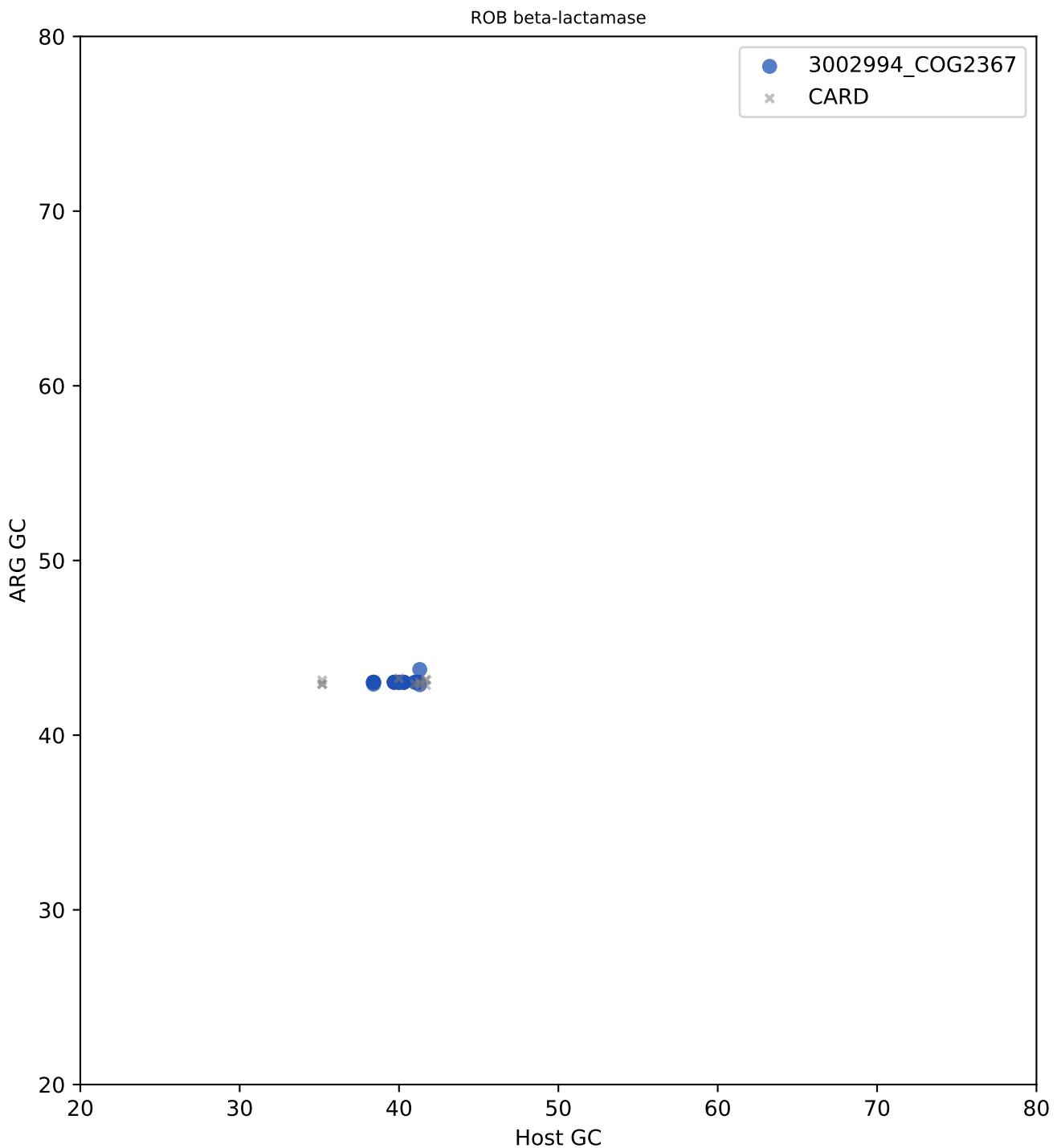
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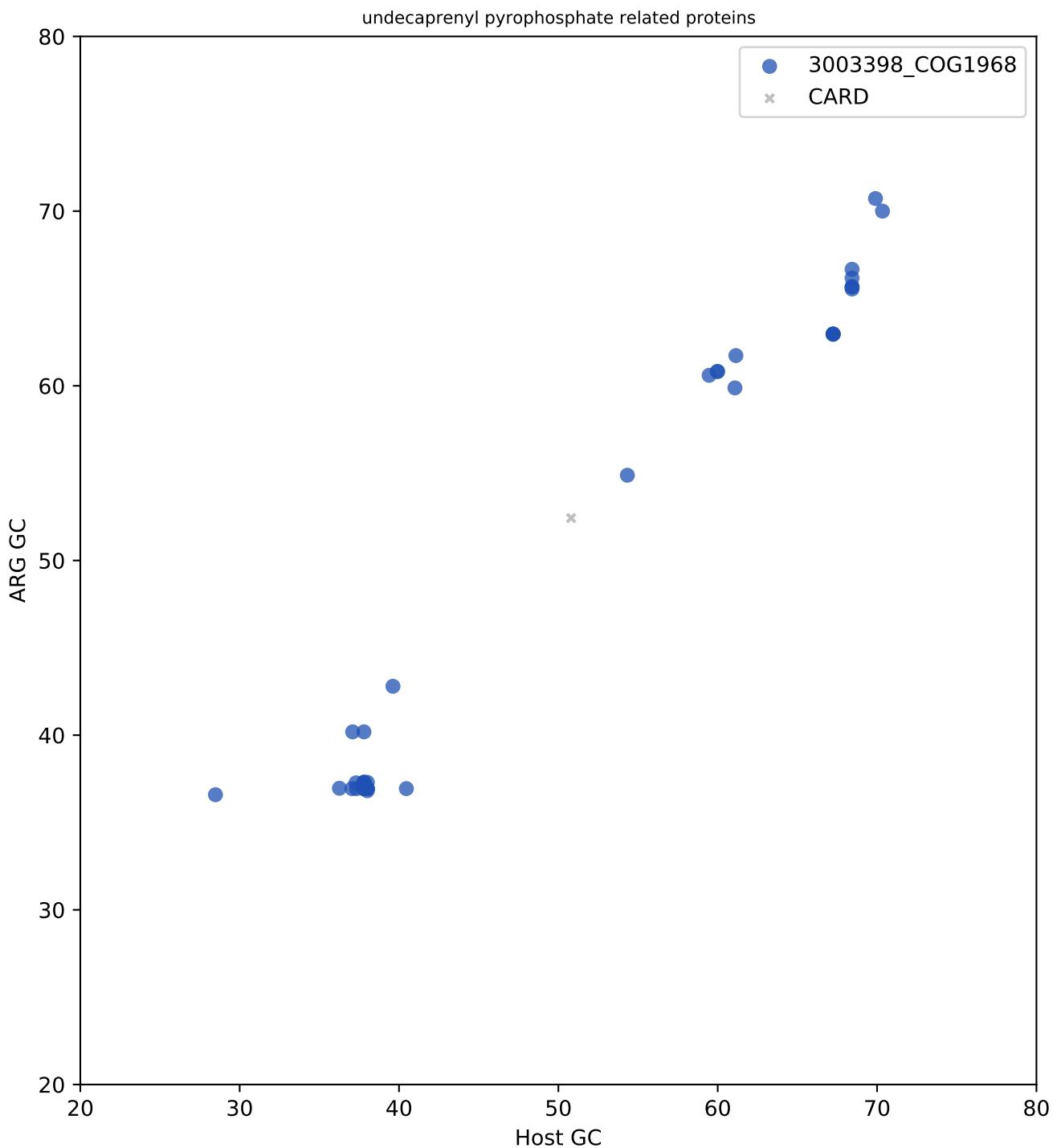
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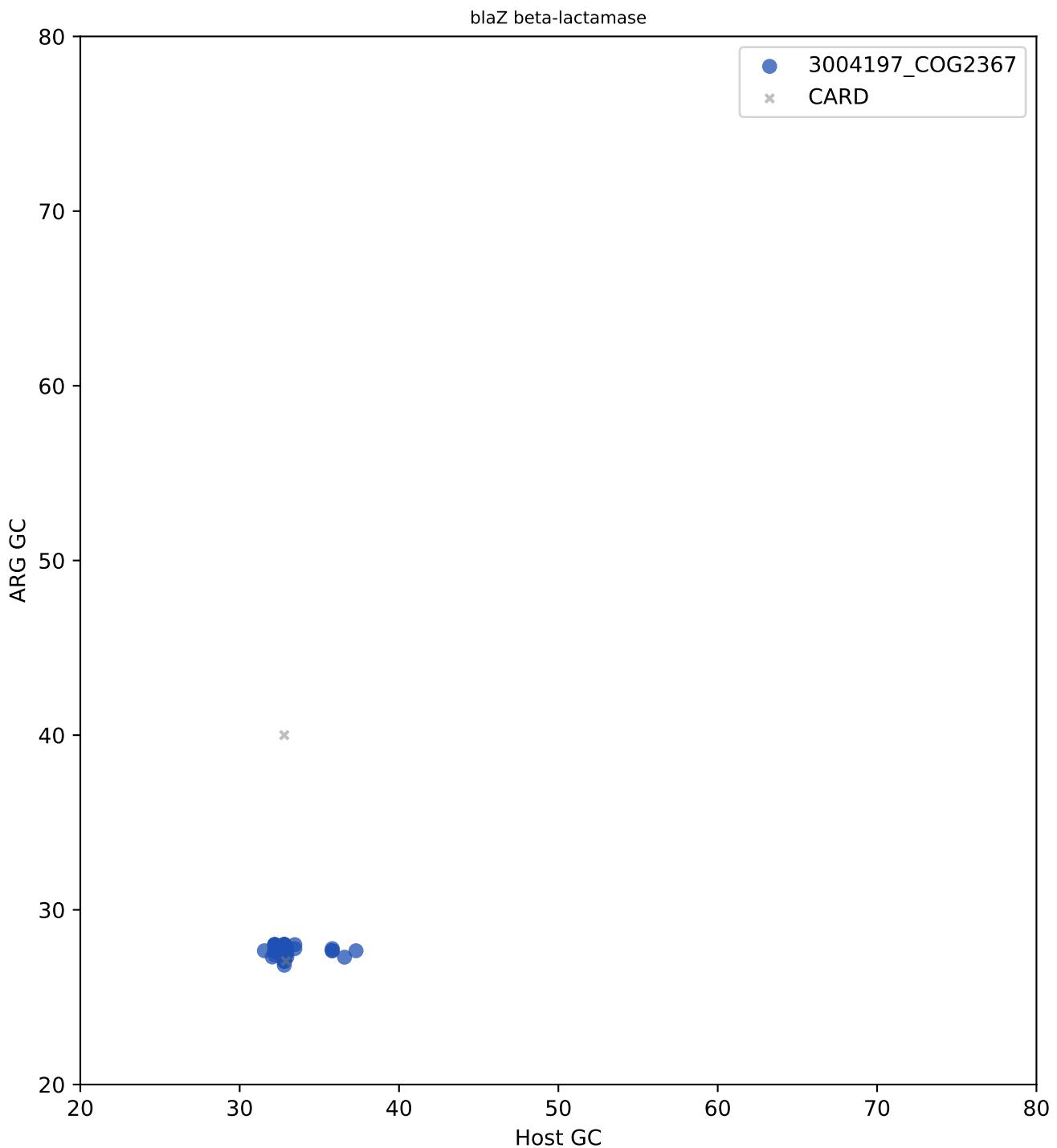
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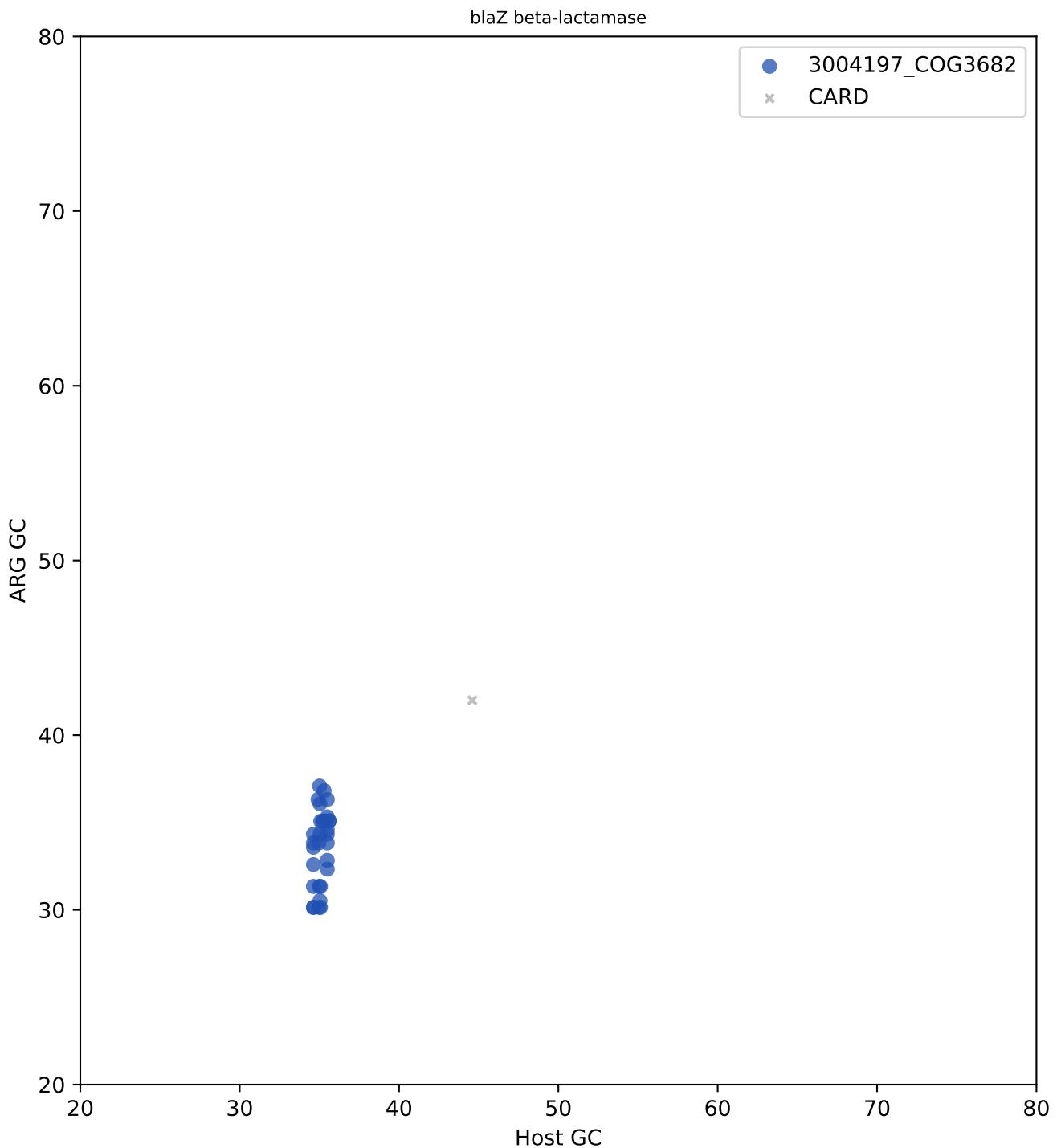
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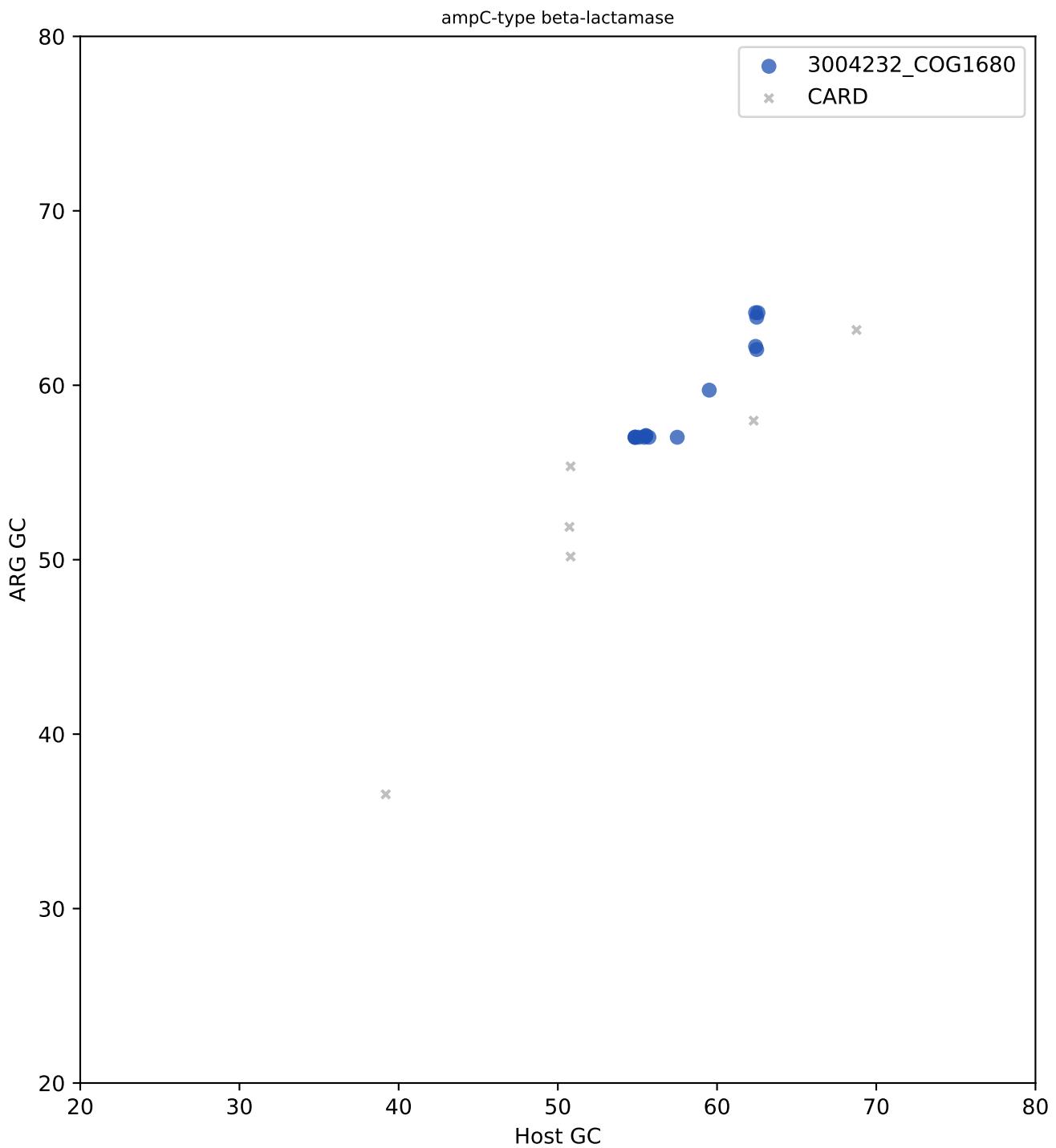
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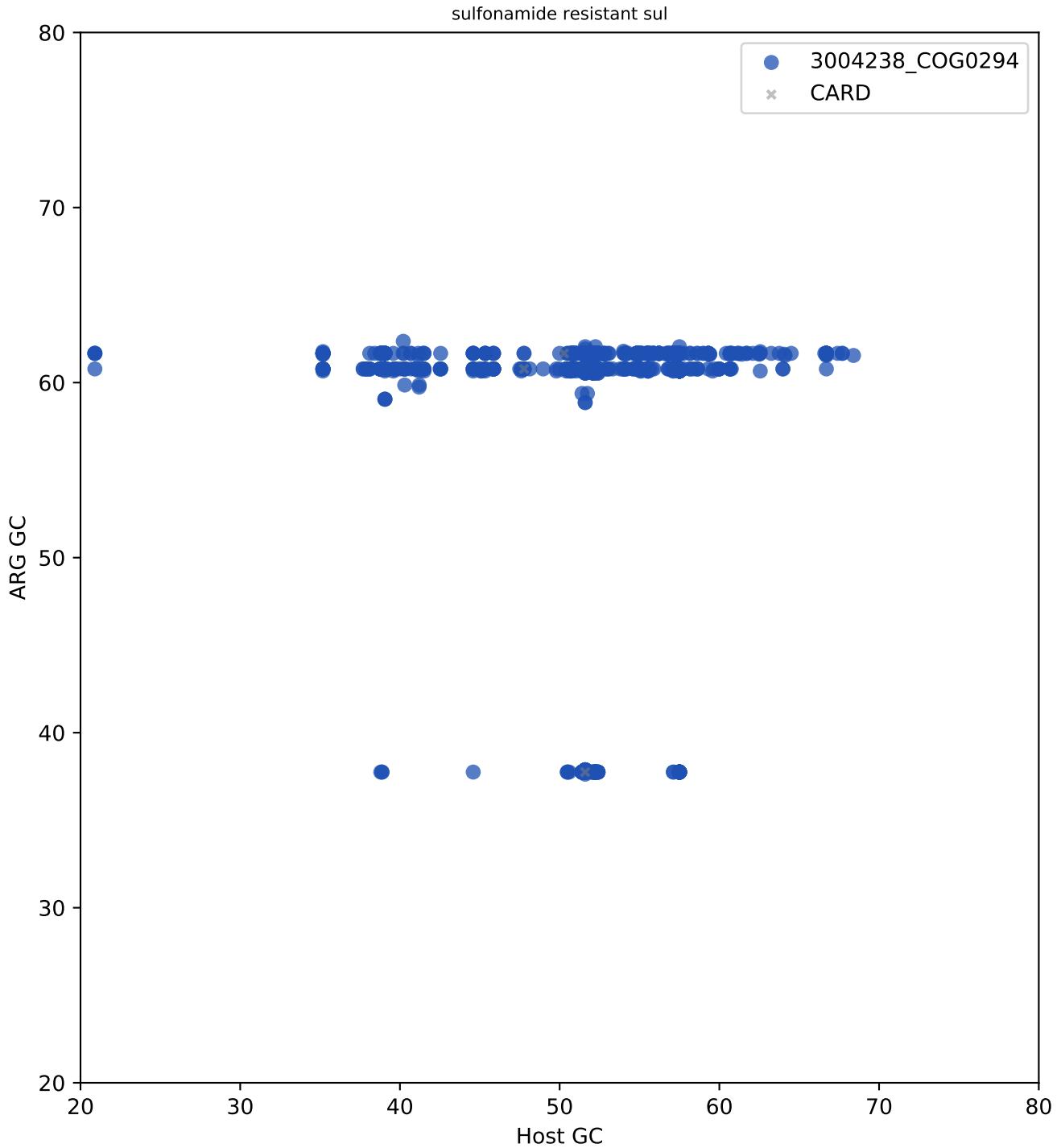
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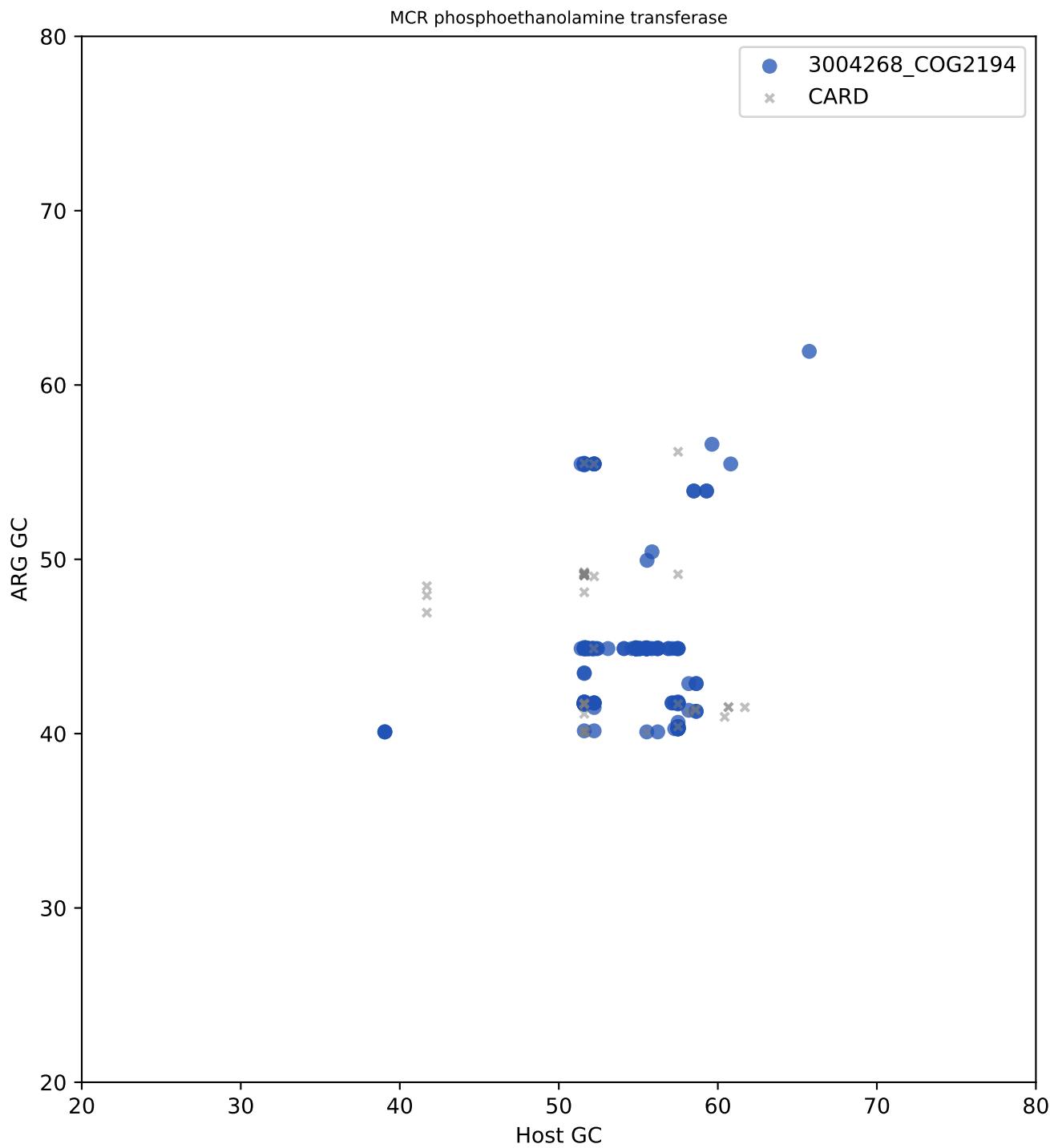
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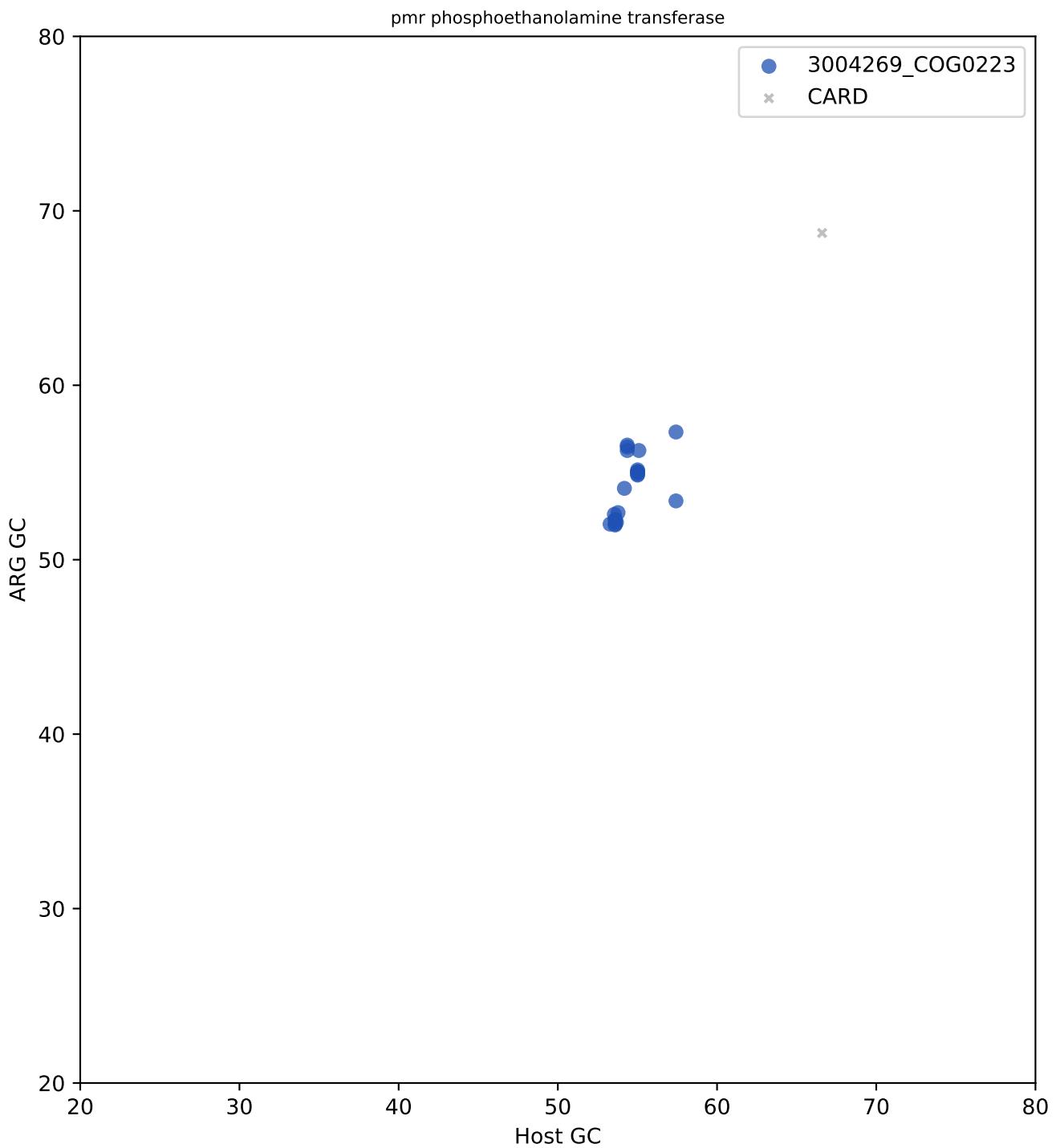
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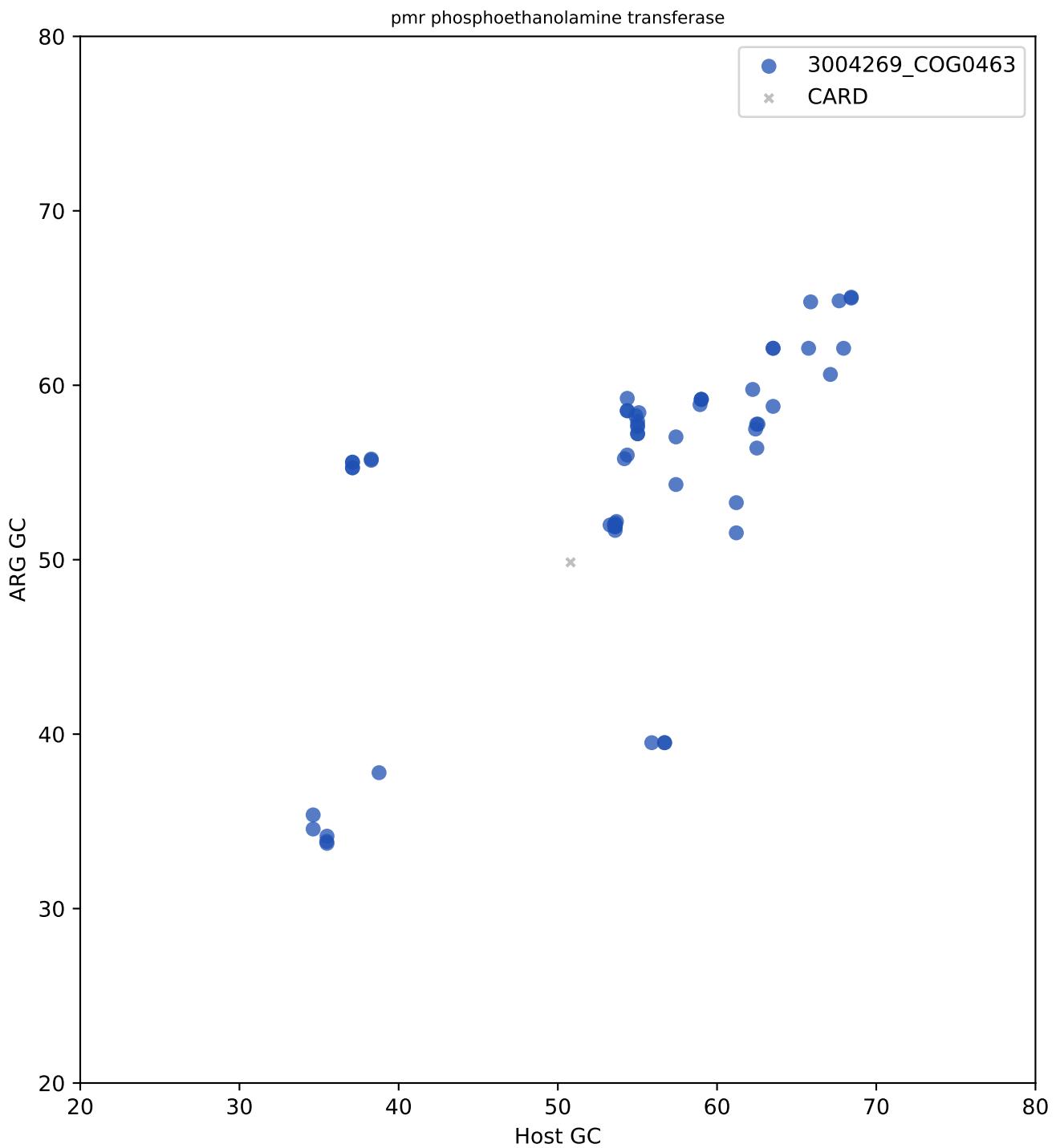
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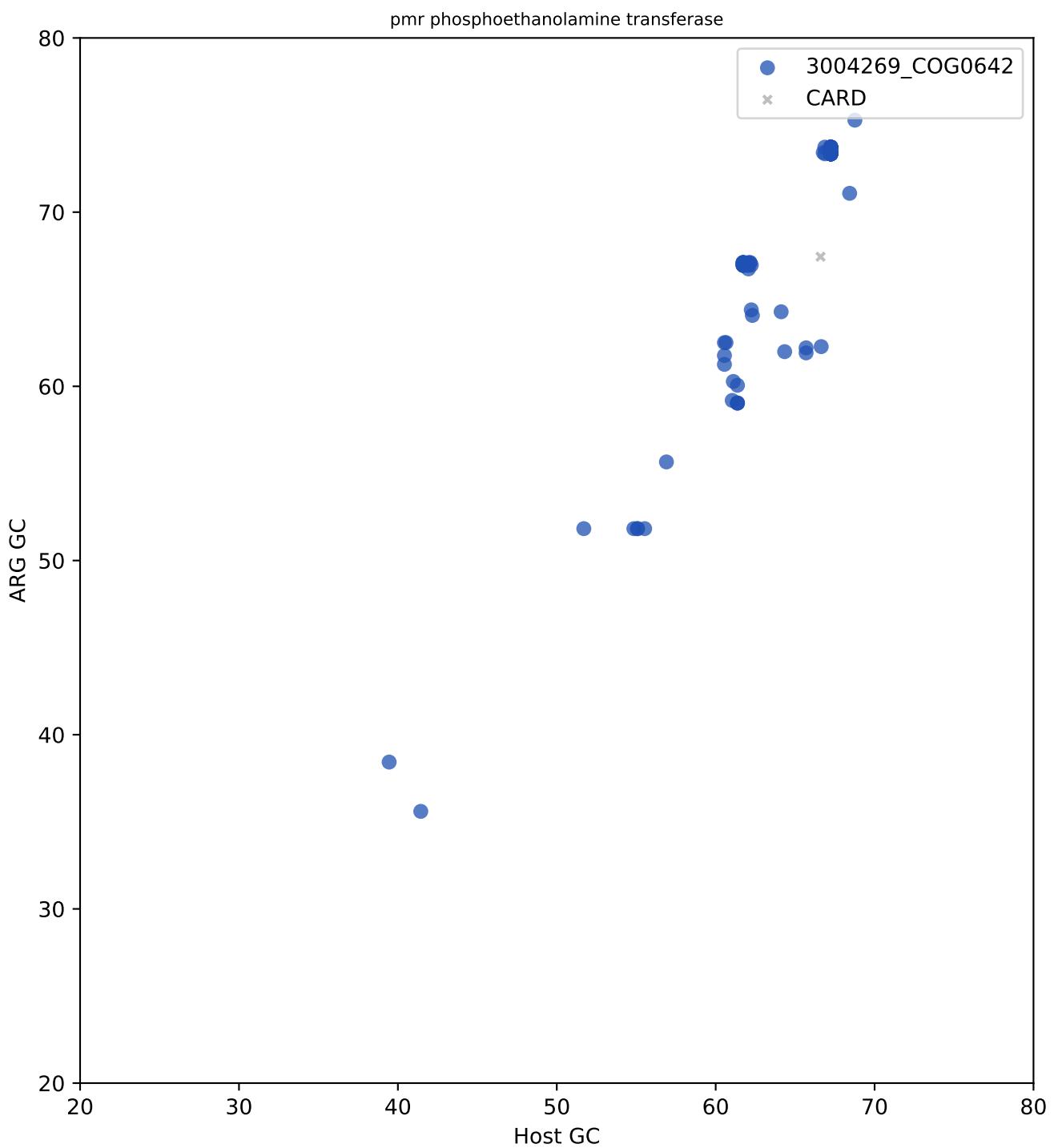
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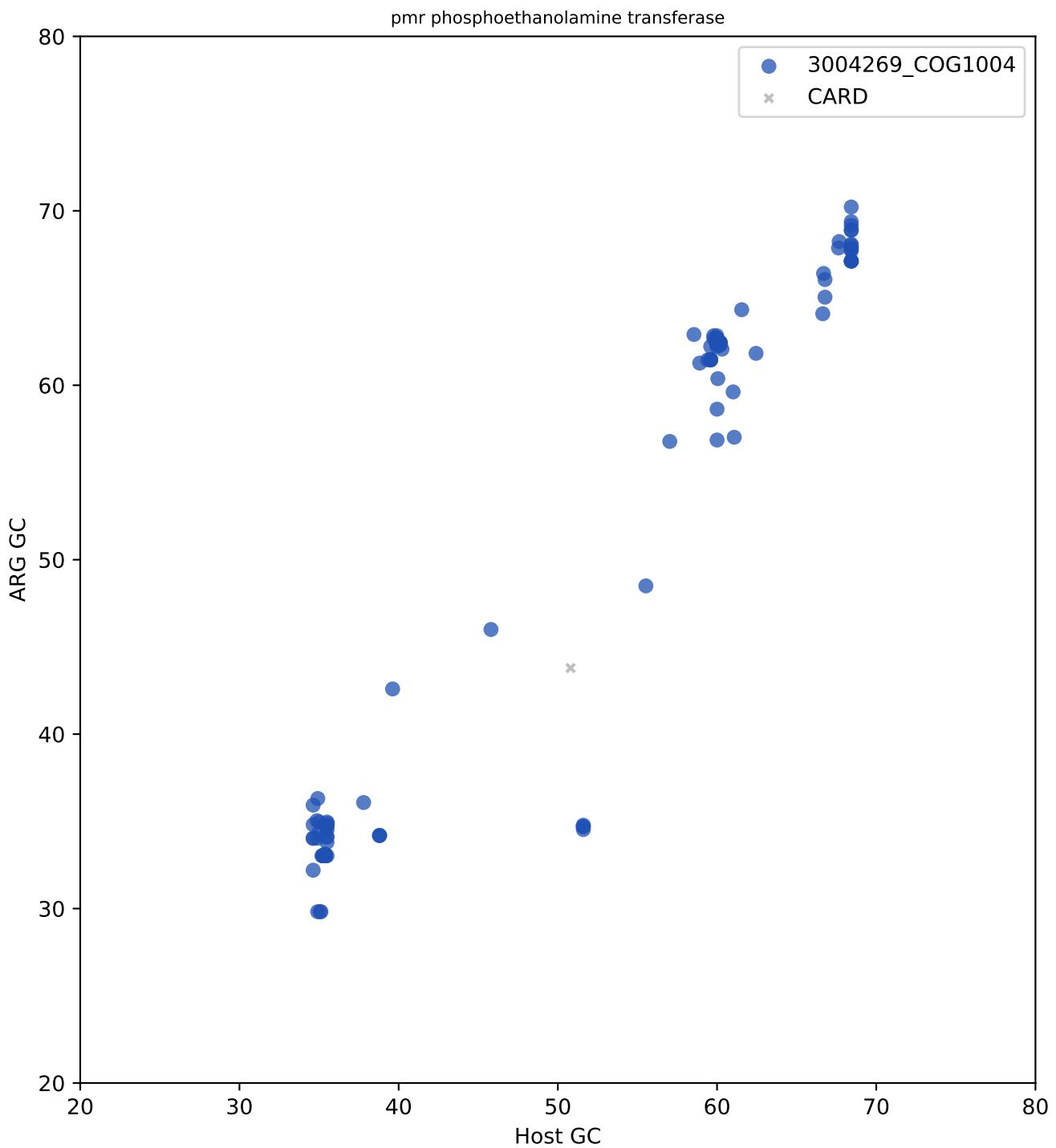
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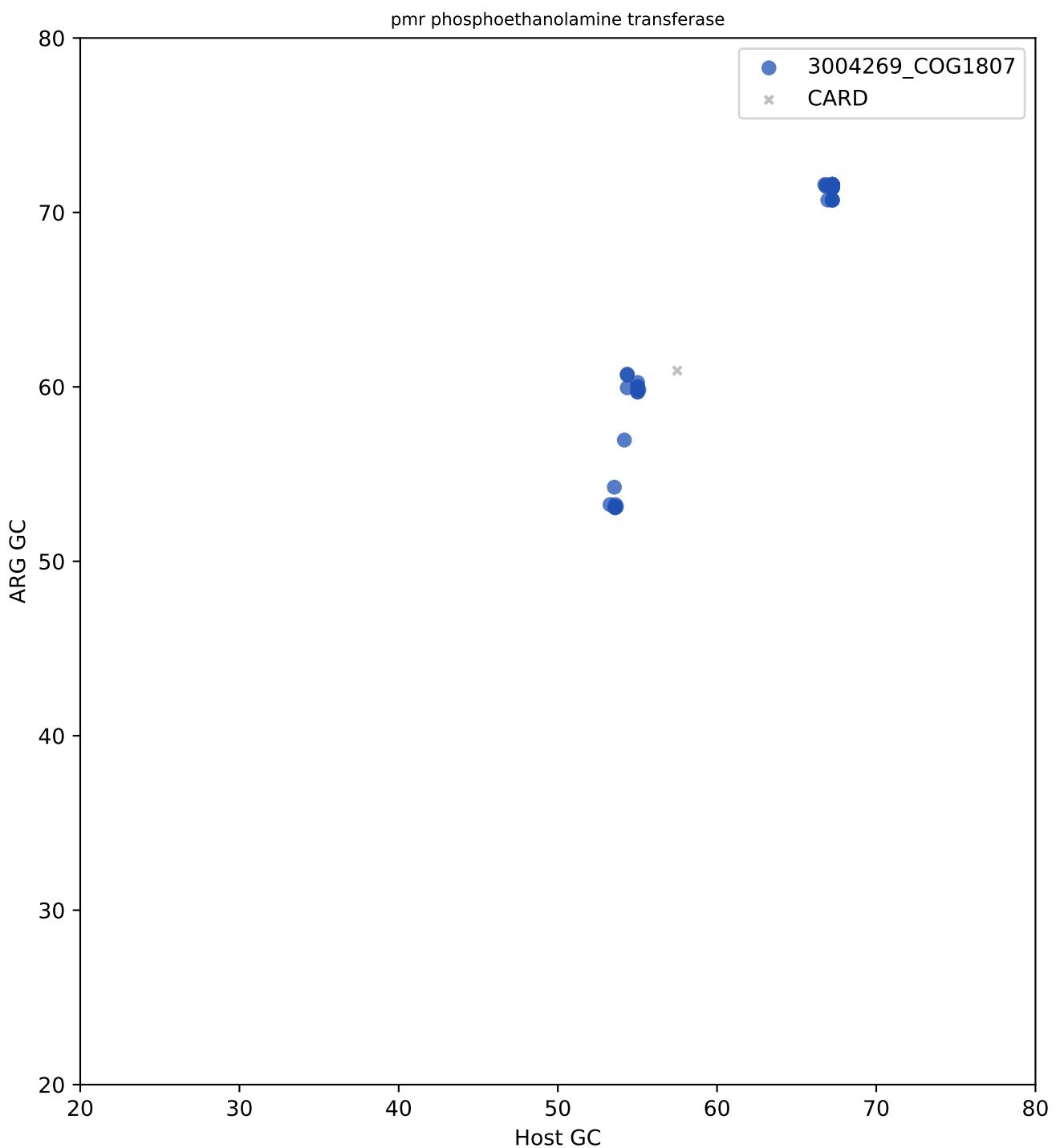
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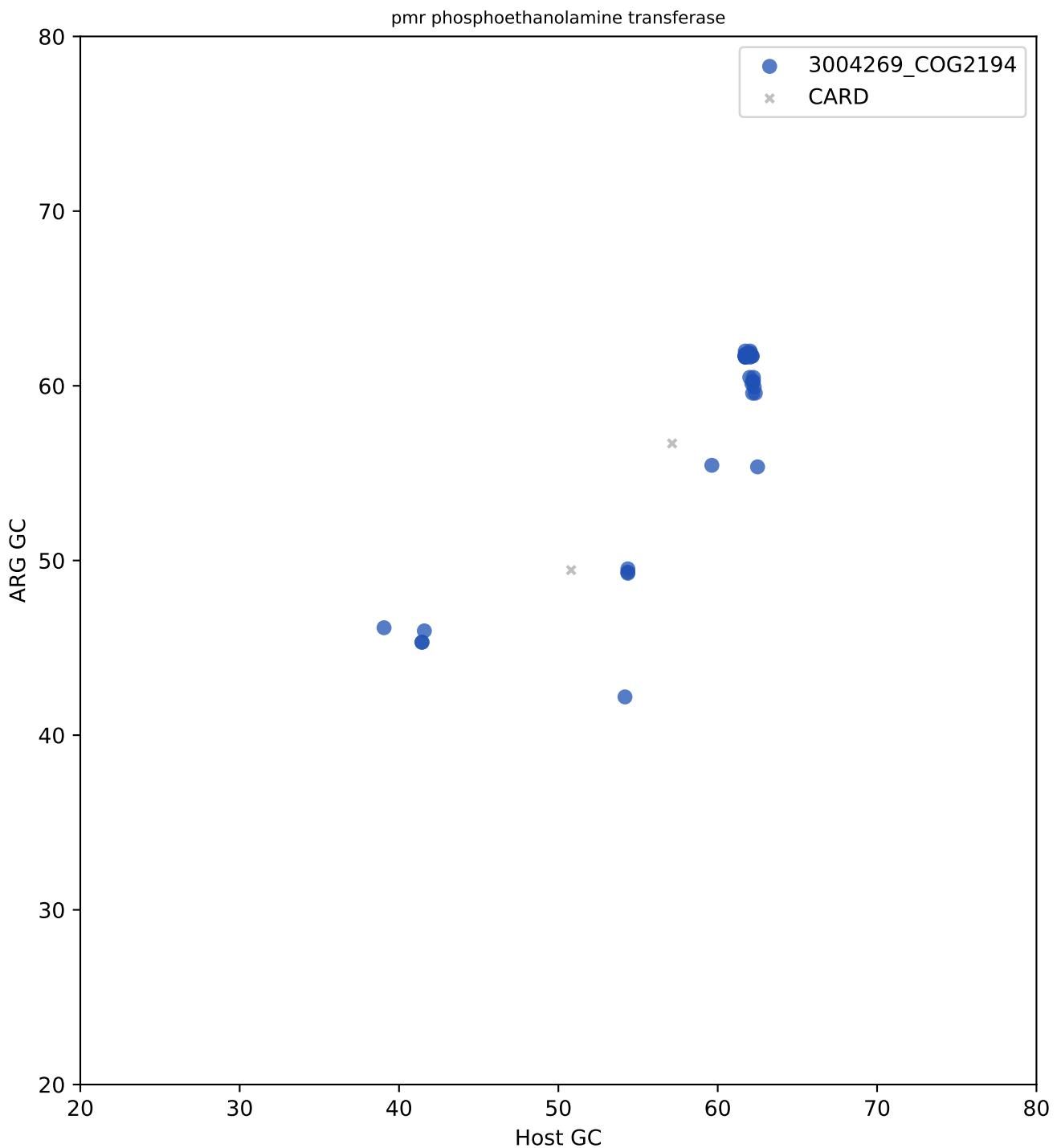
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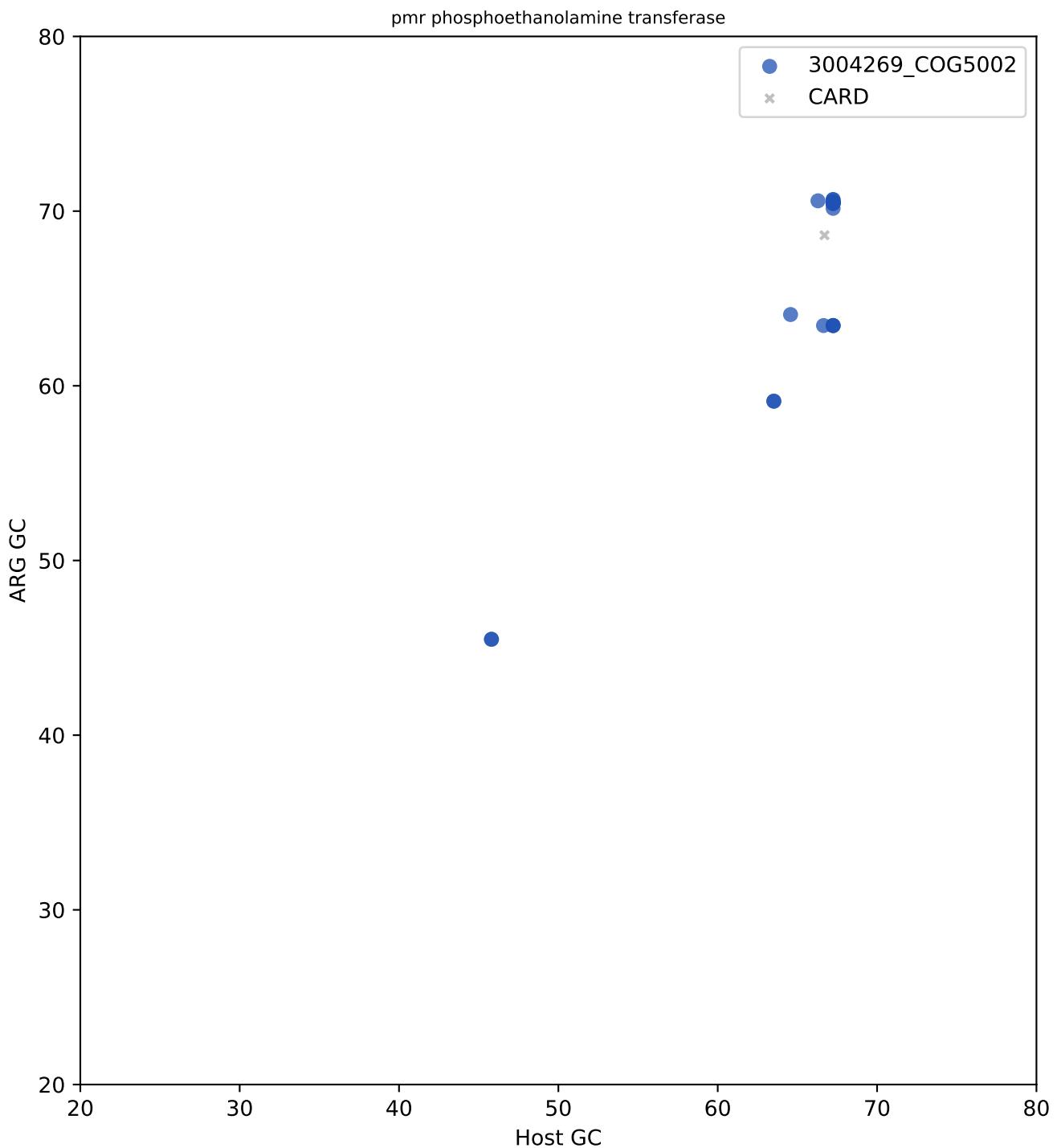
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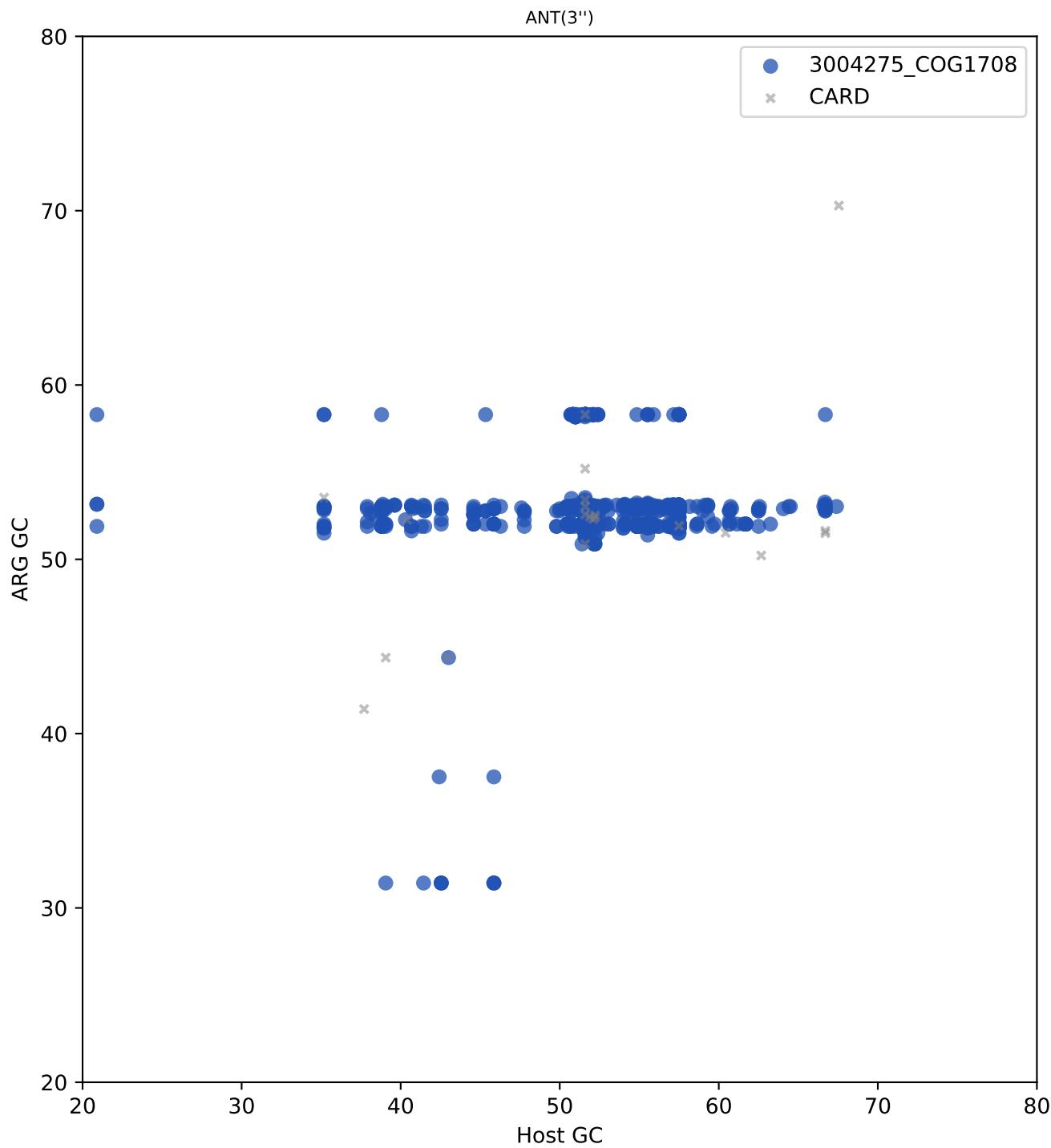
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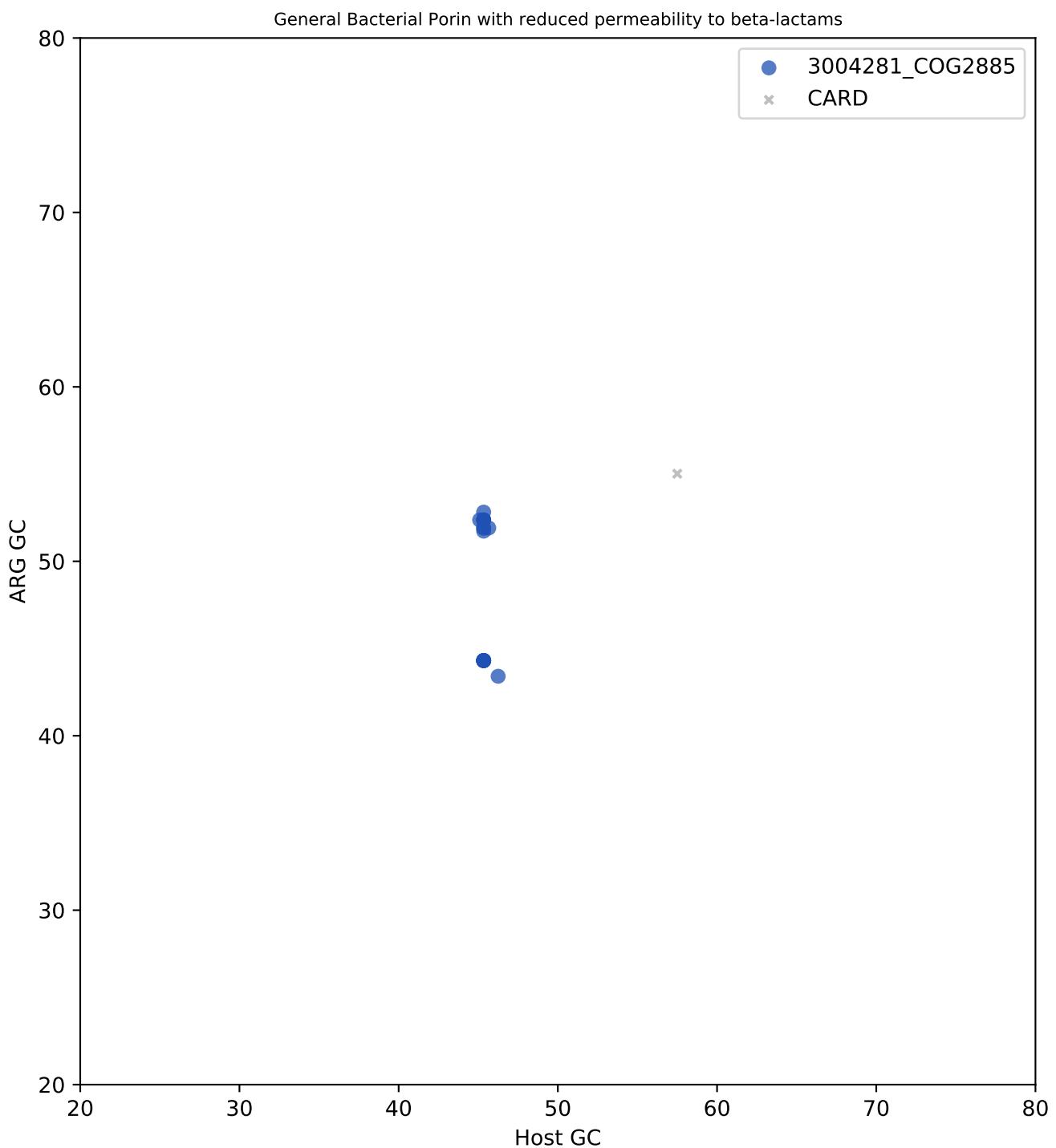
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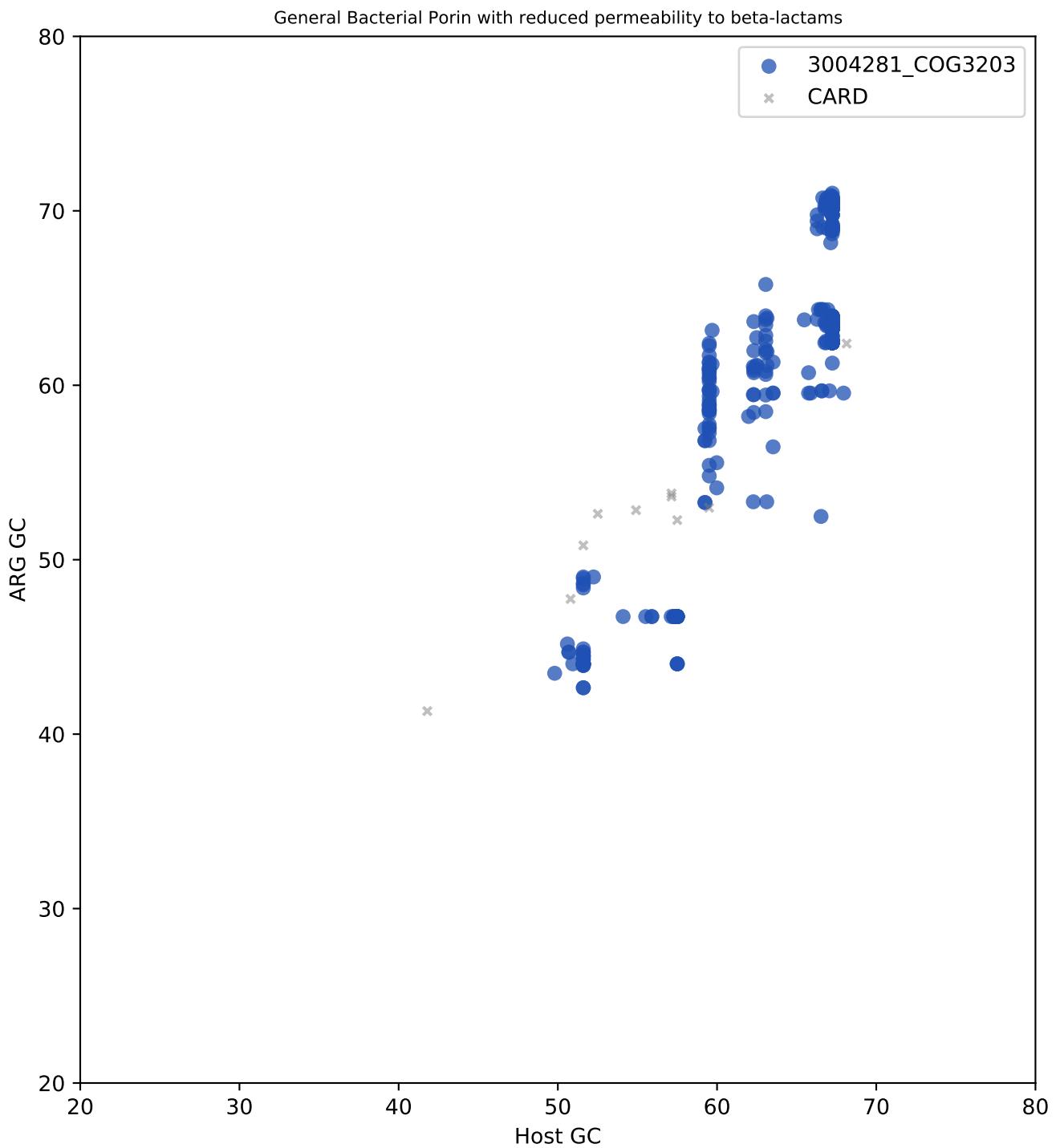
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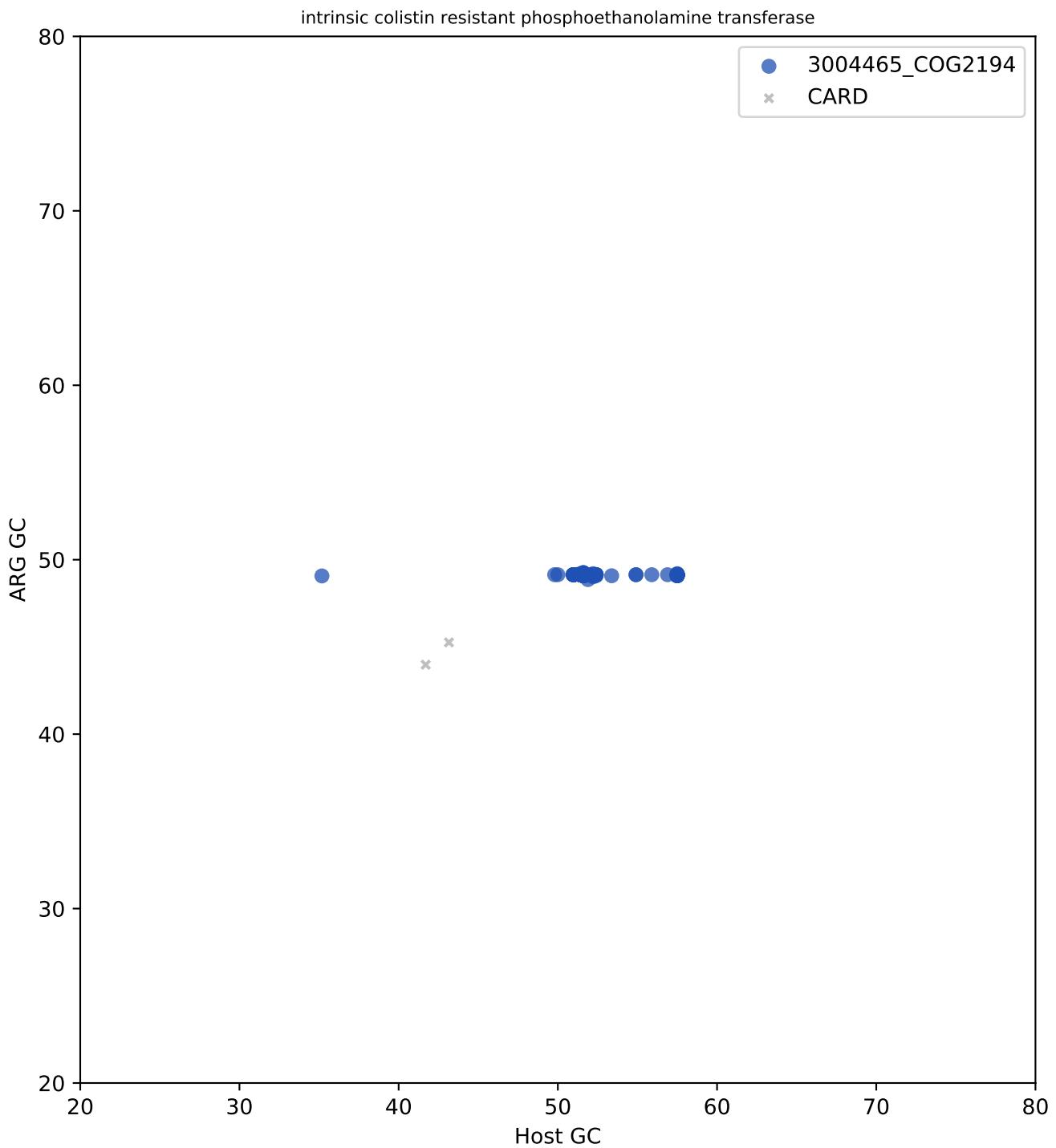
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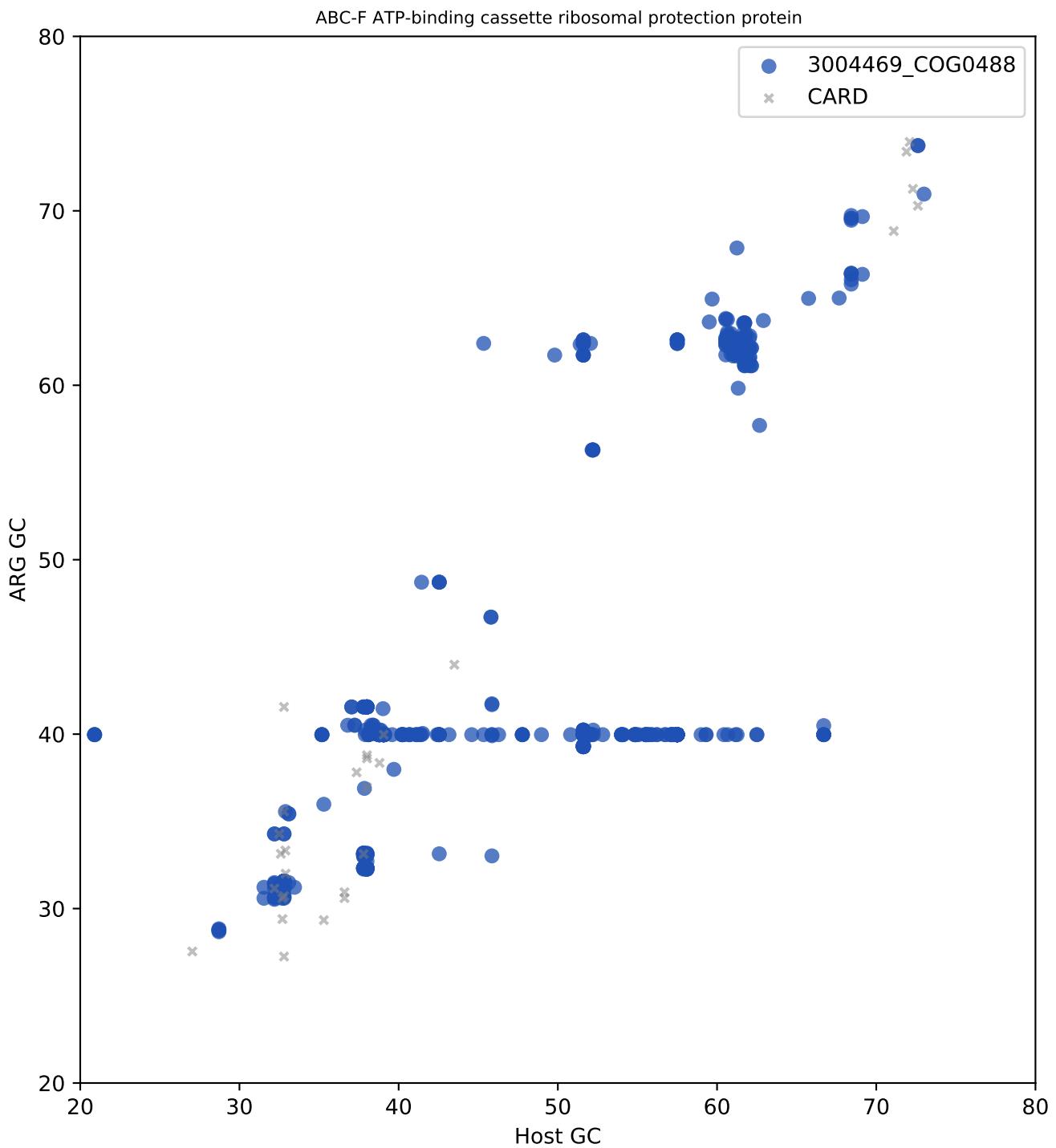
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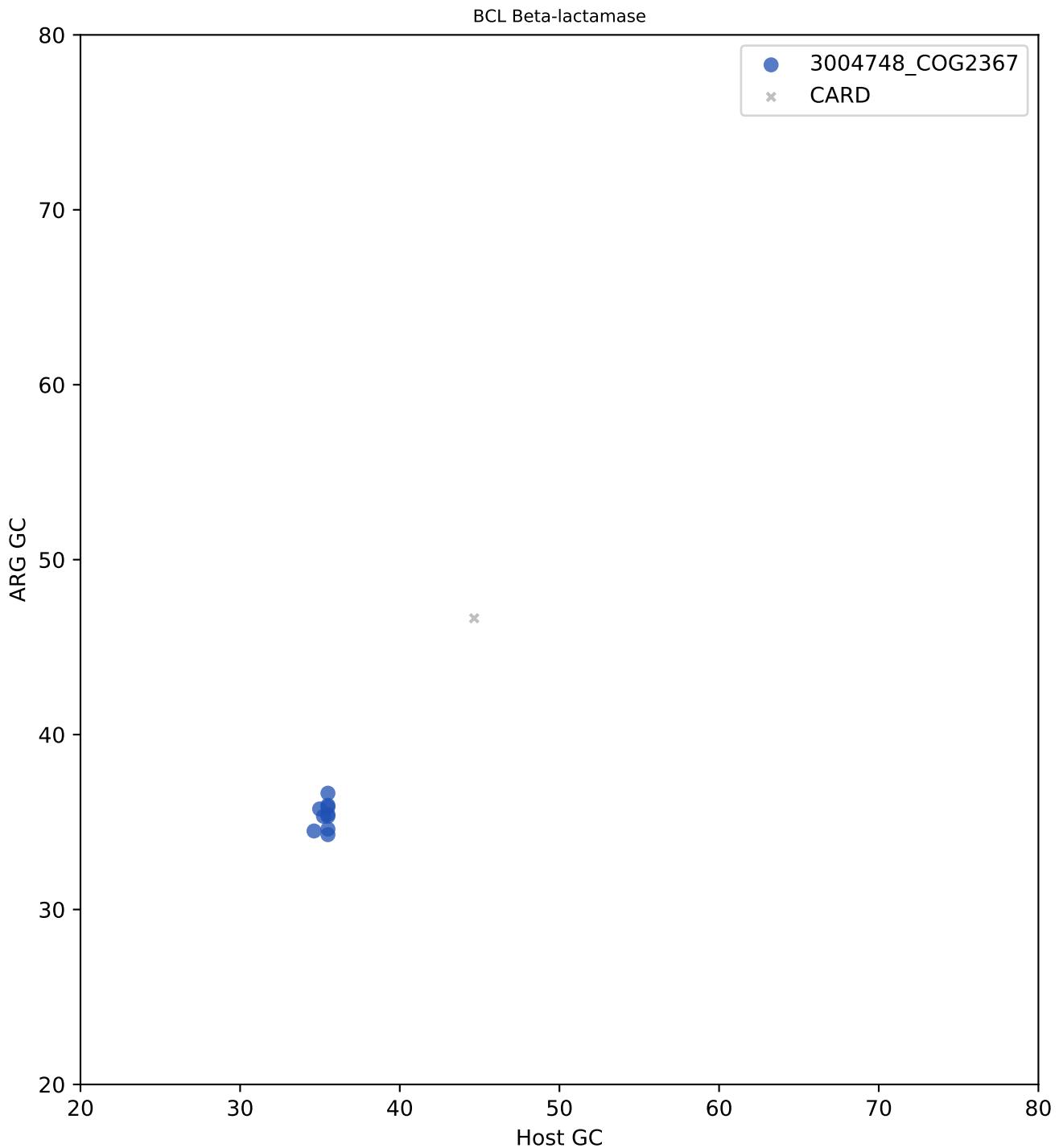
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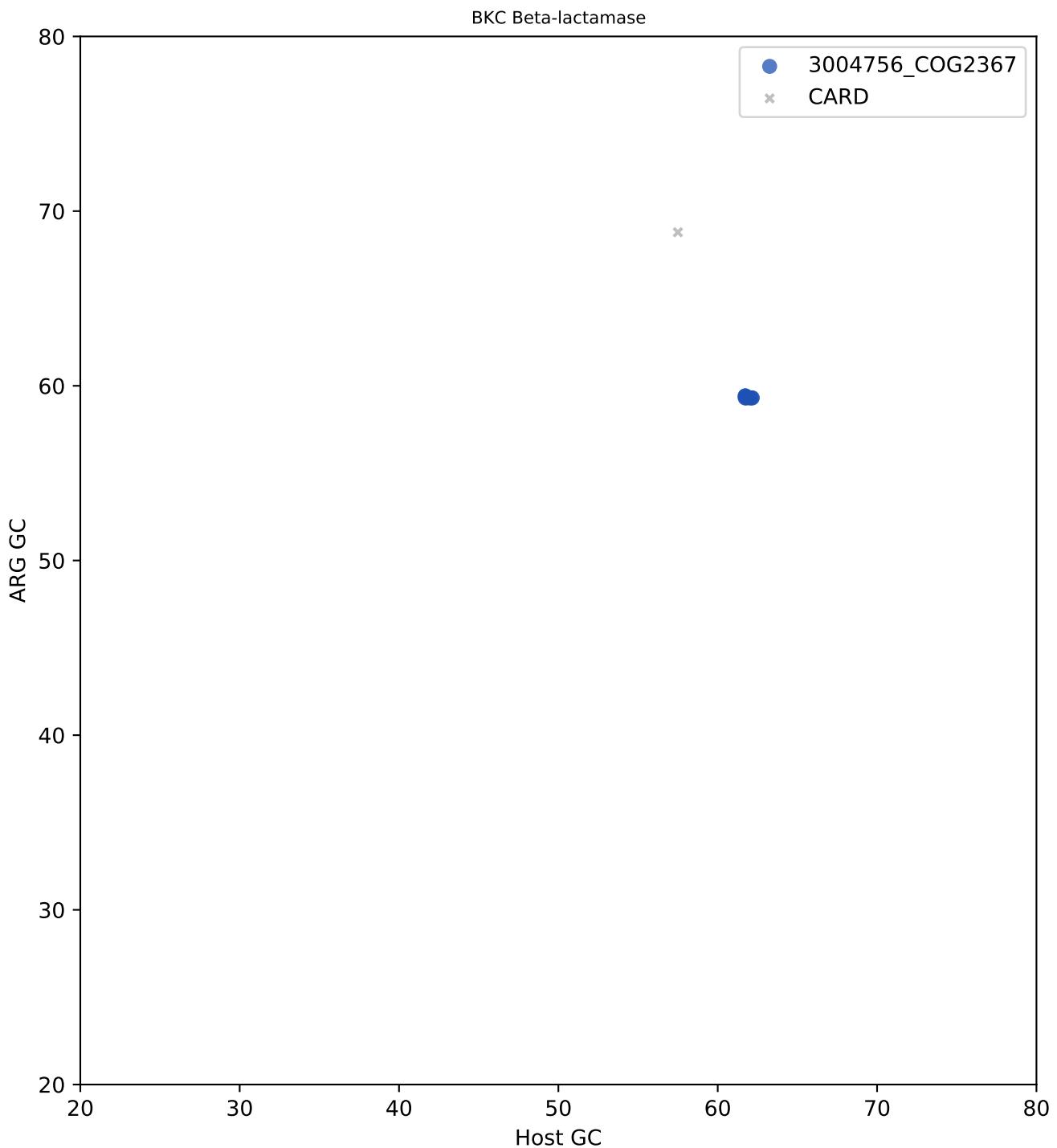
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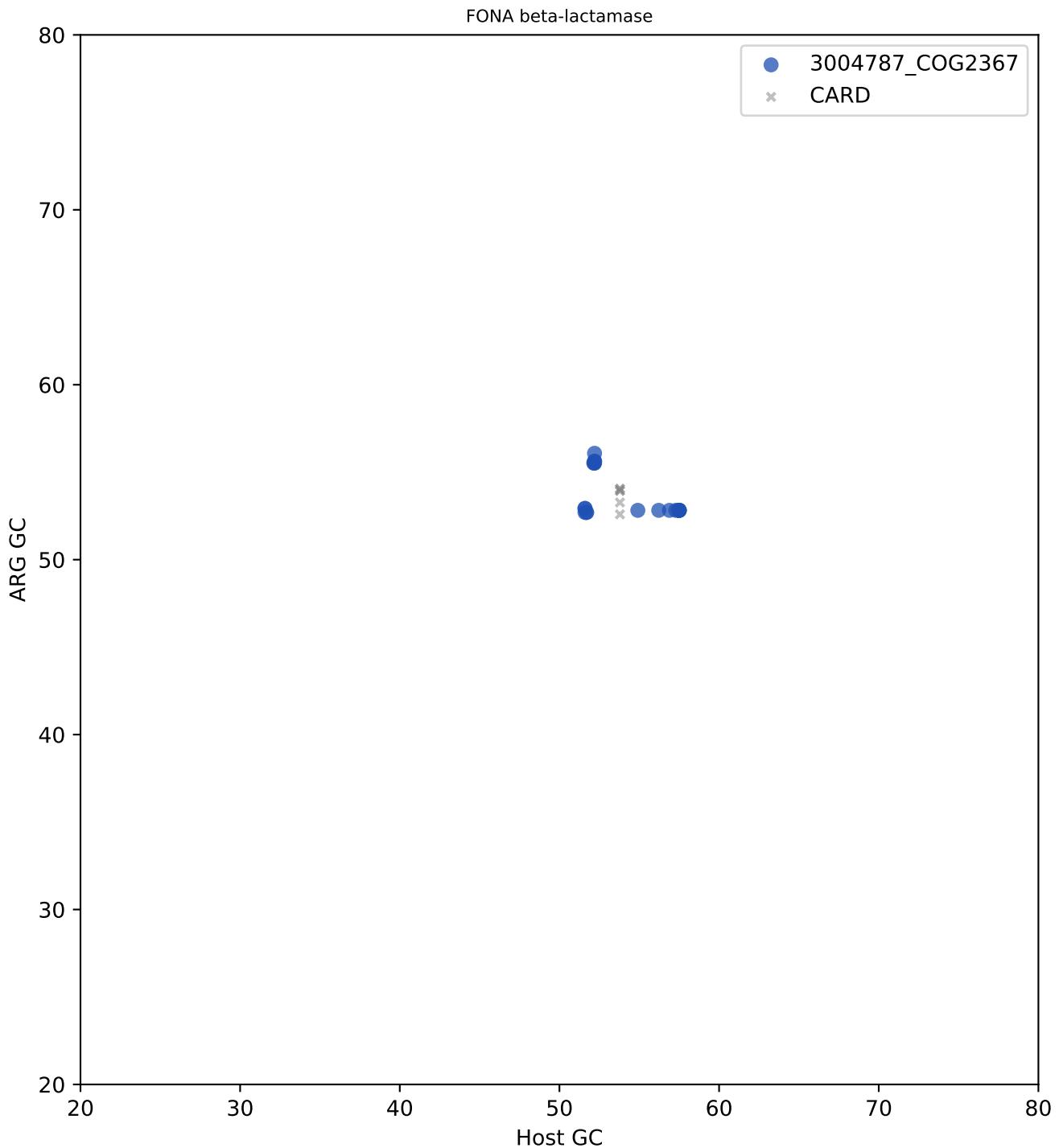
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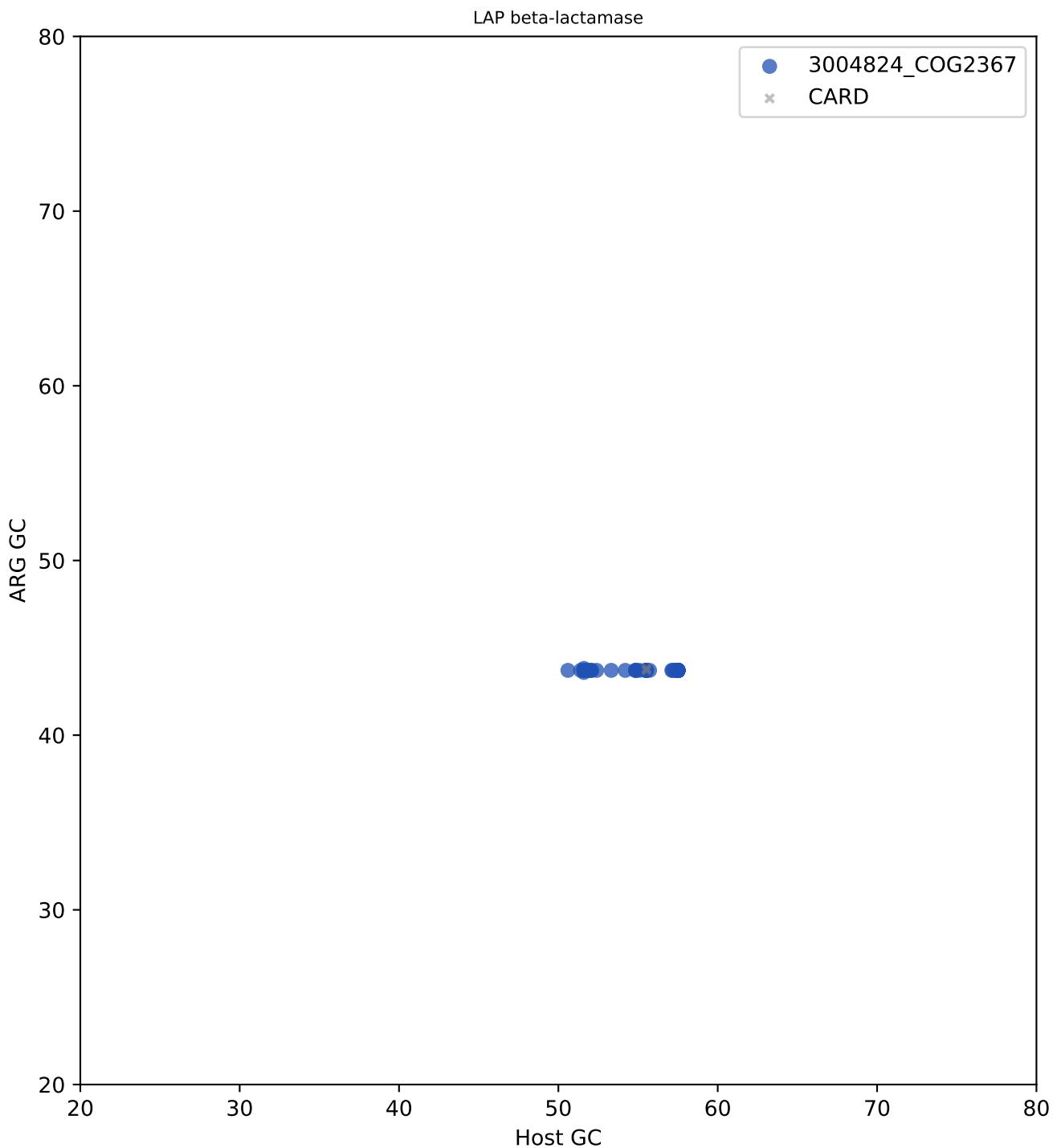
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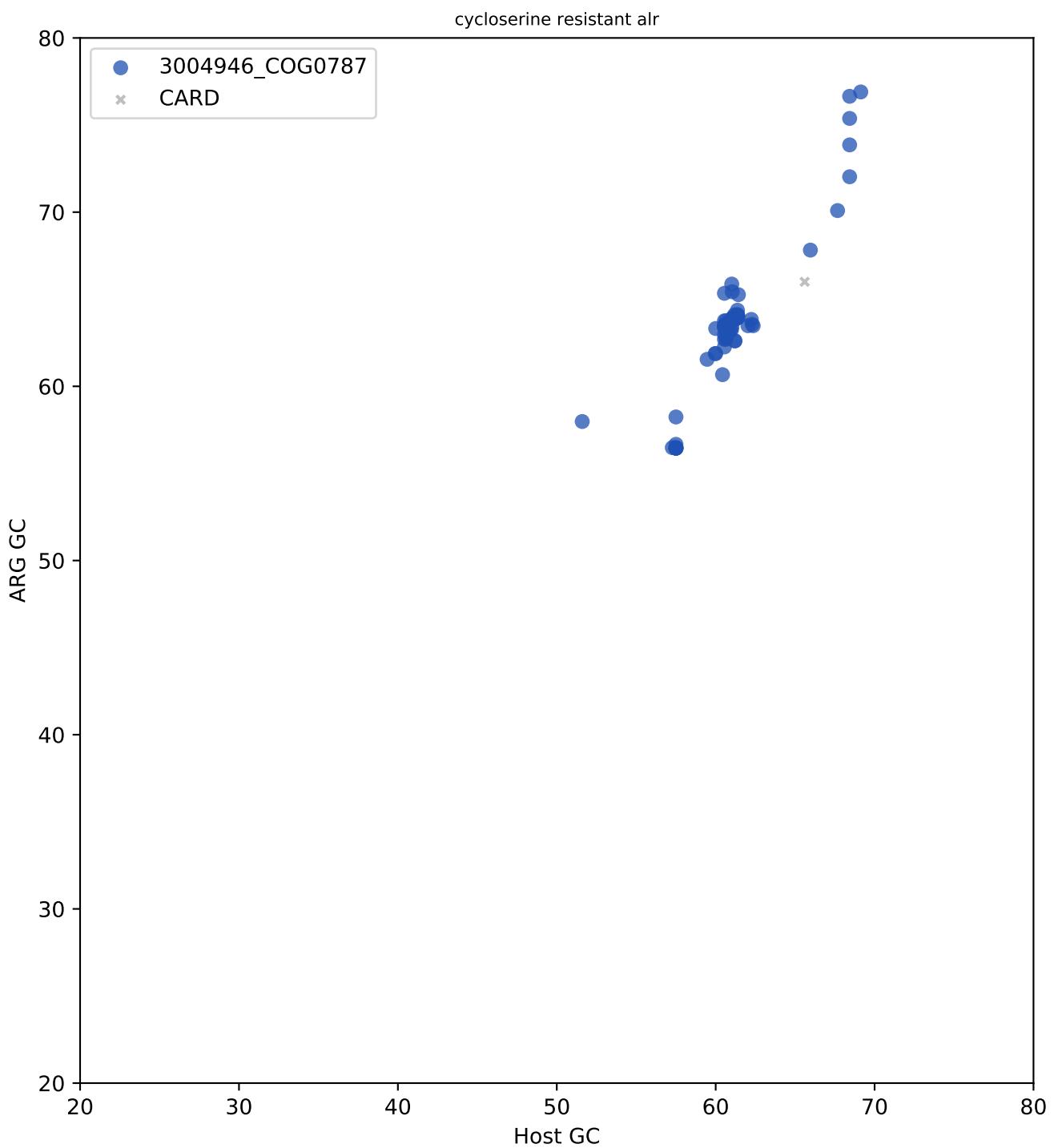
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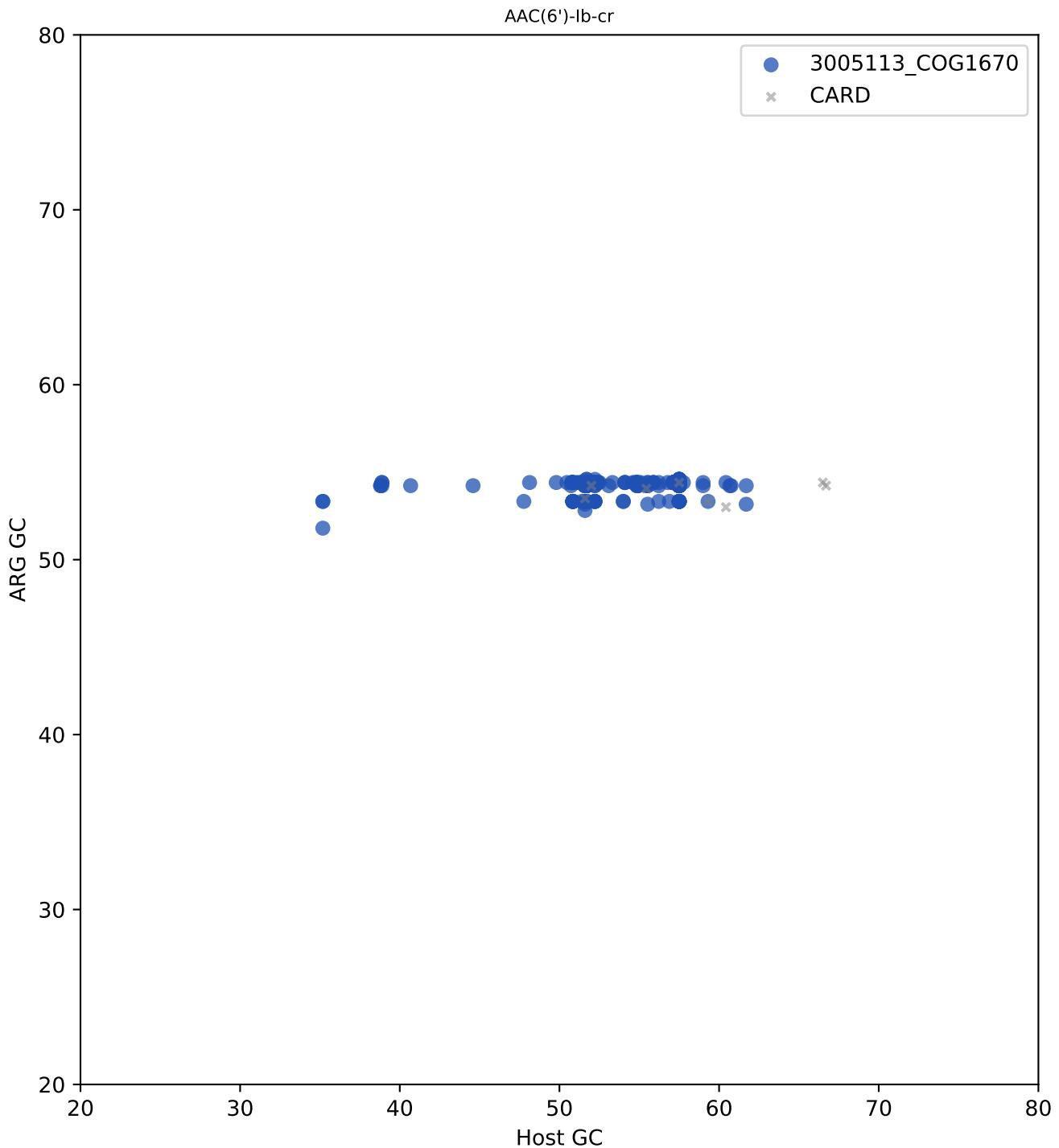
Supplementary Figure S1: (continued).



Supplementary Figure S1: (continued).

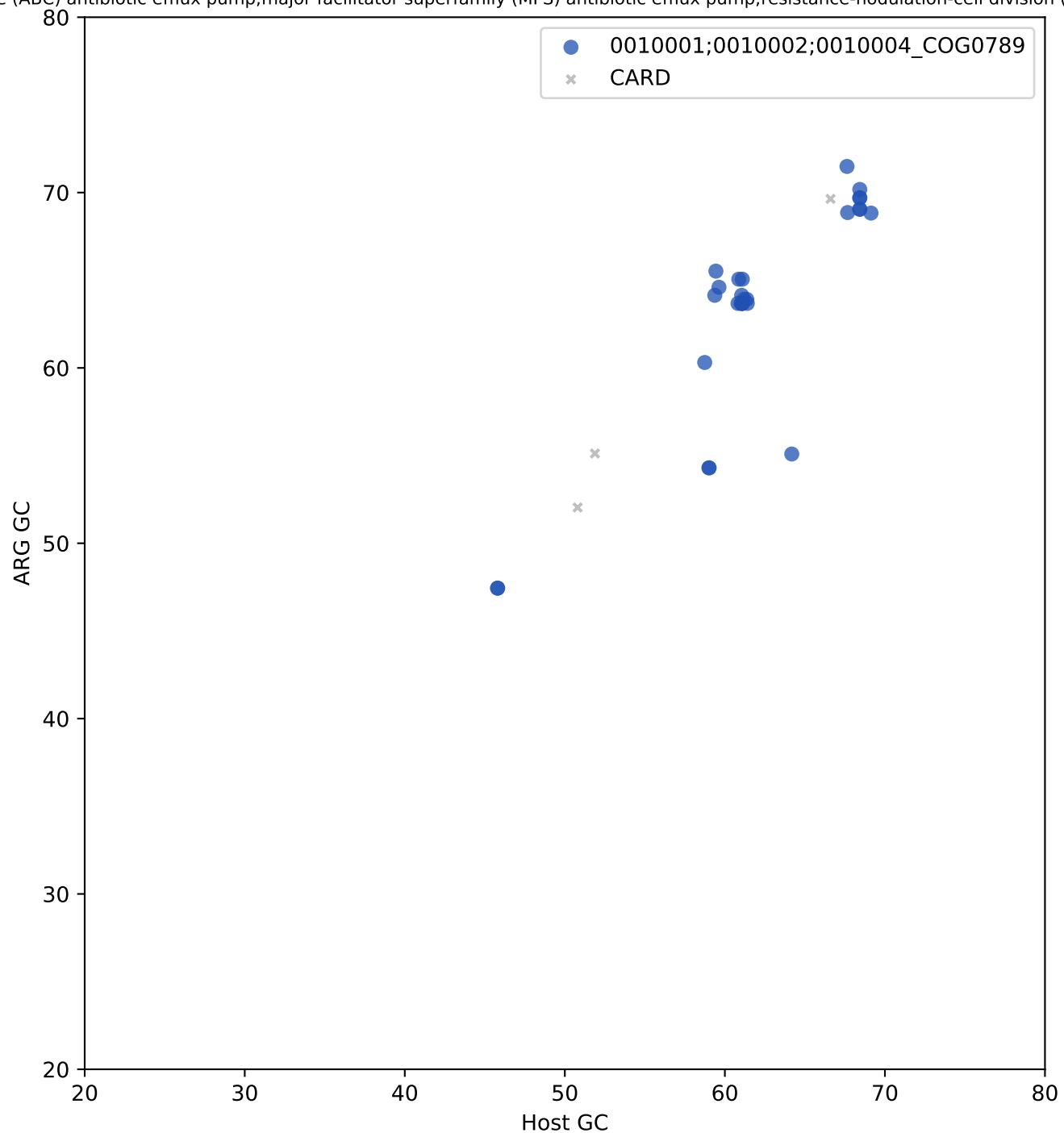


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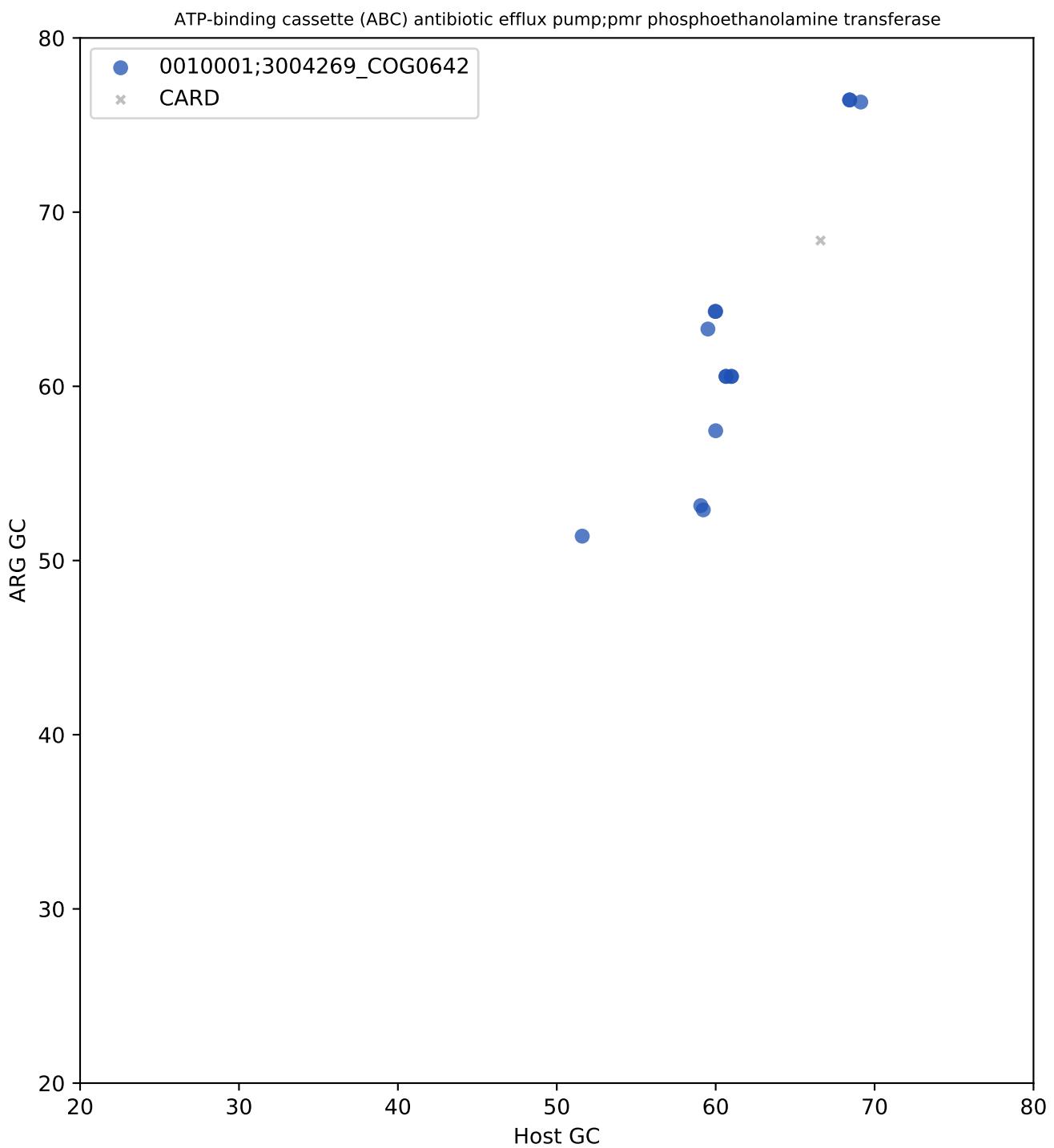


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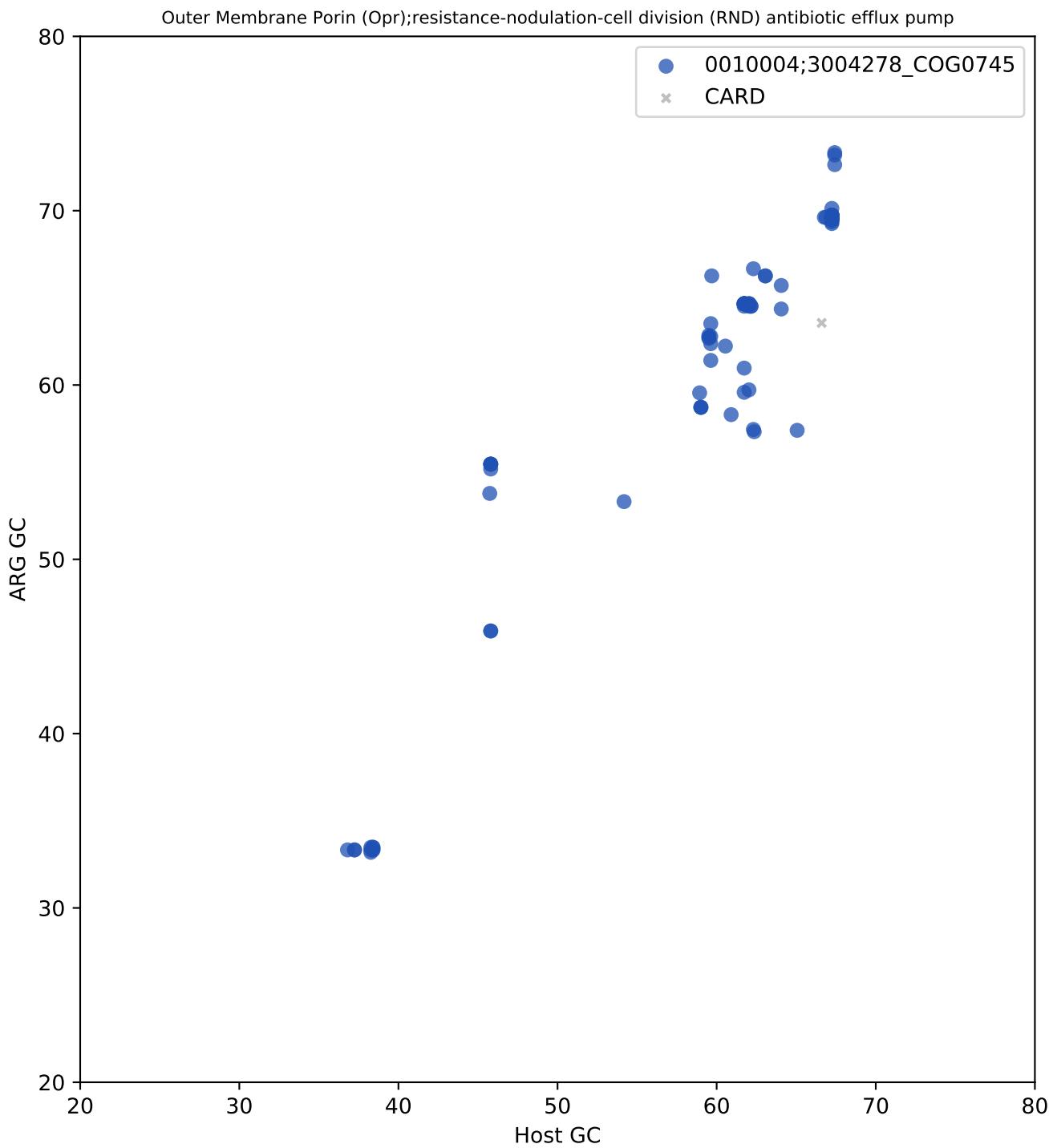
cassette (ABC) antibiotic efflux pump;major facilitator superfamily (MFS) antibiotic efflux pump;resistance-nodulation-cell division (RND) antibiotic



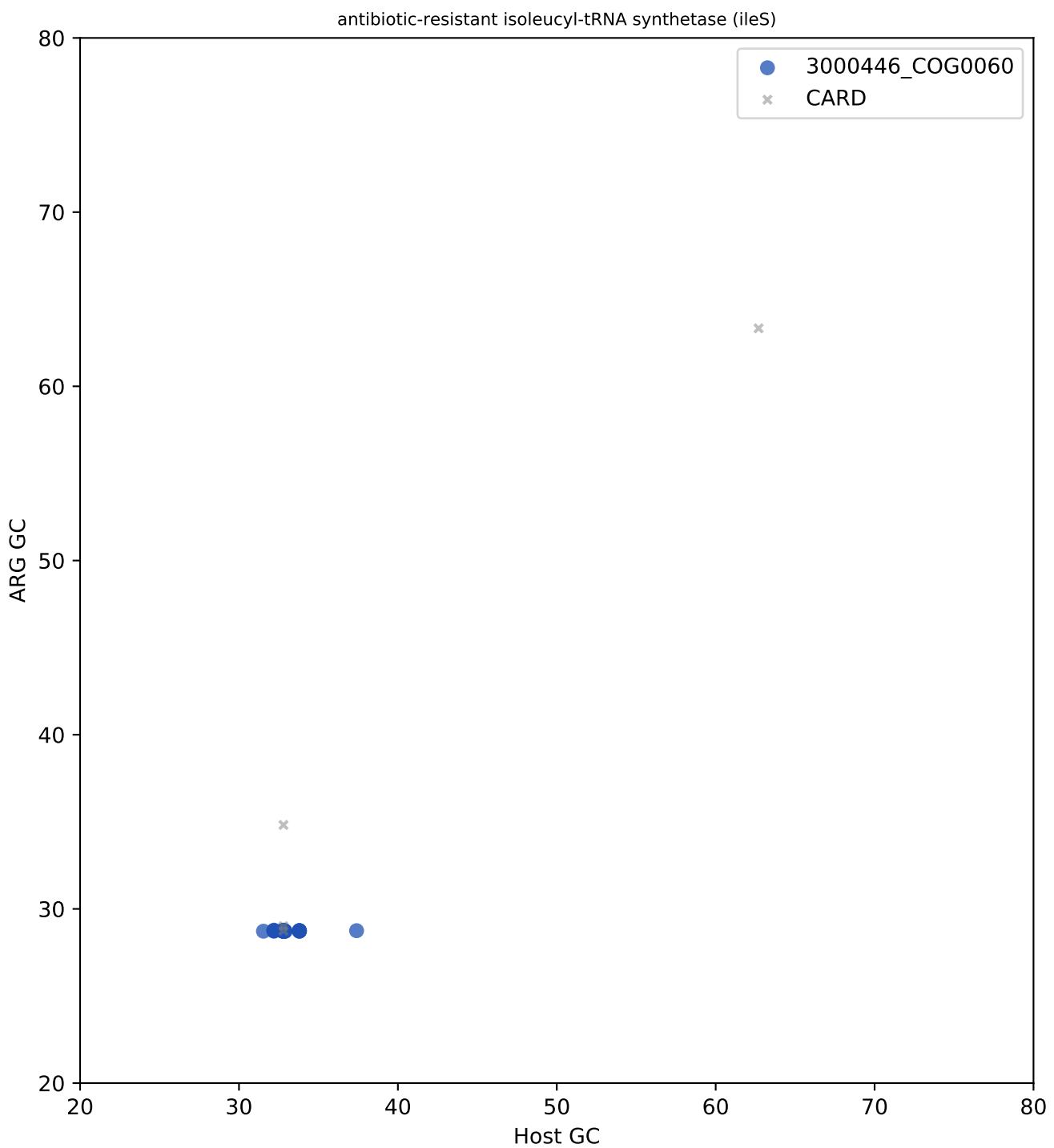
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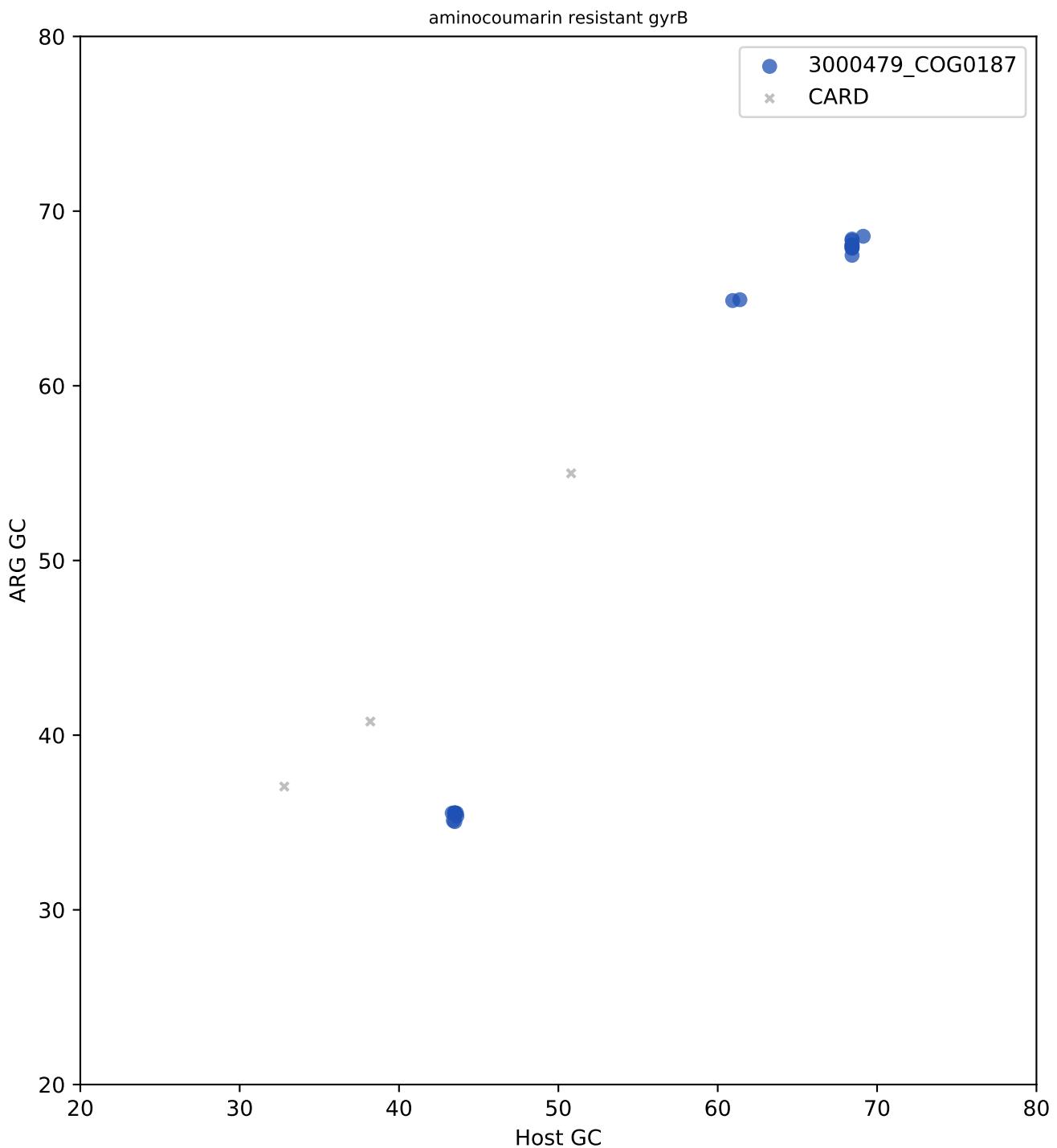
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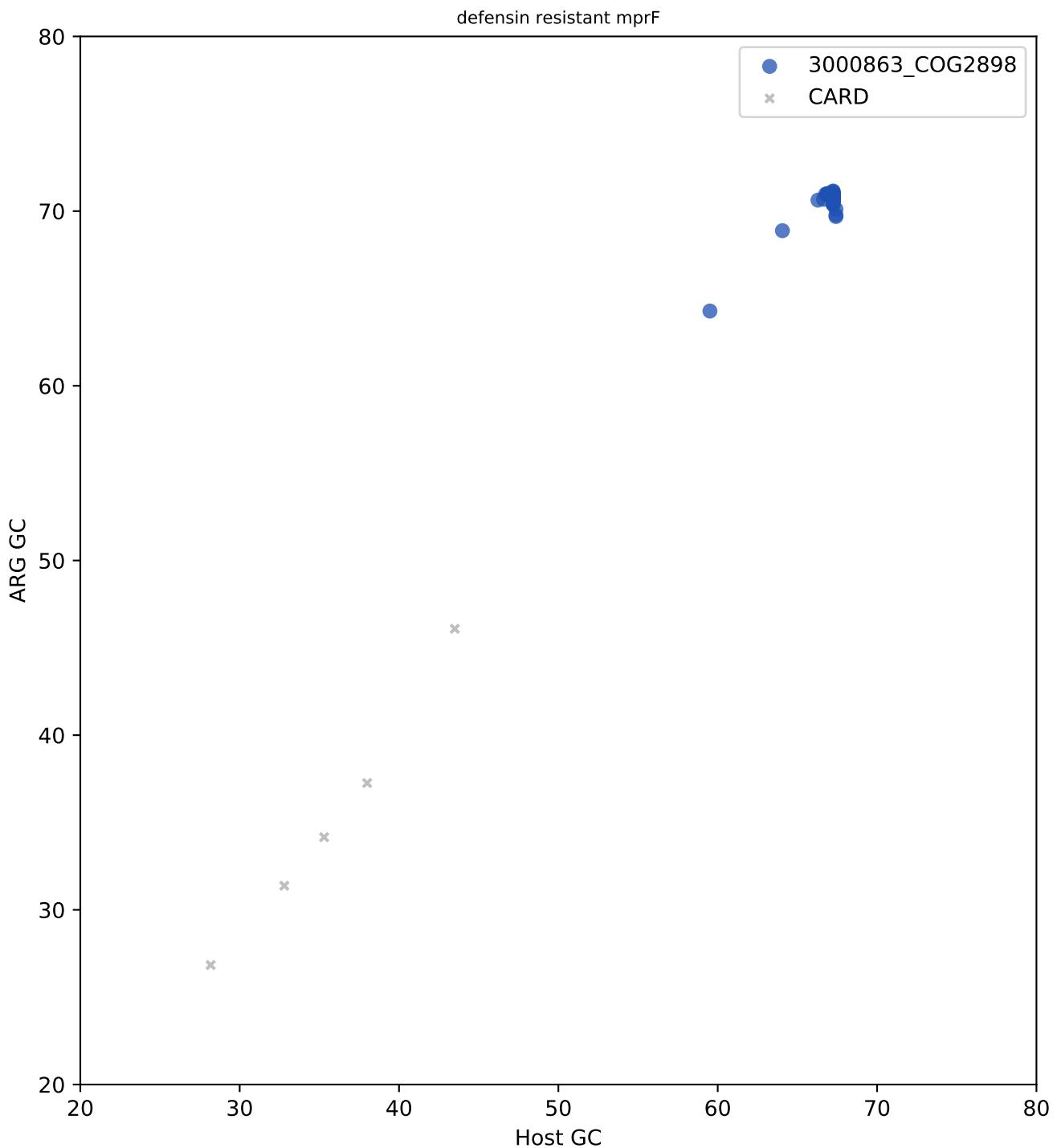
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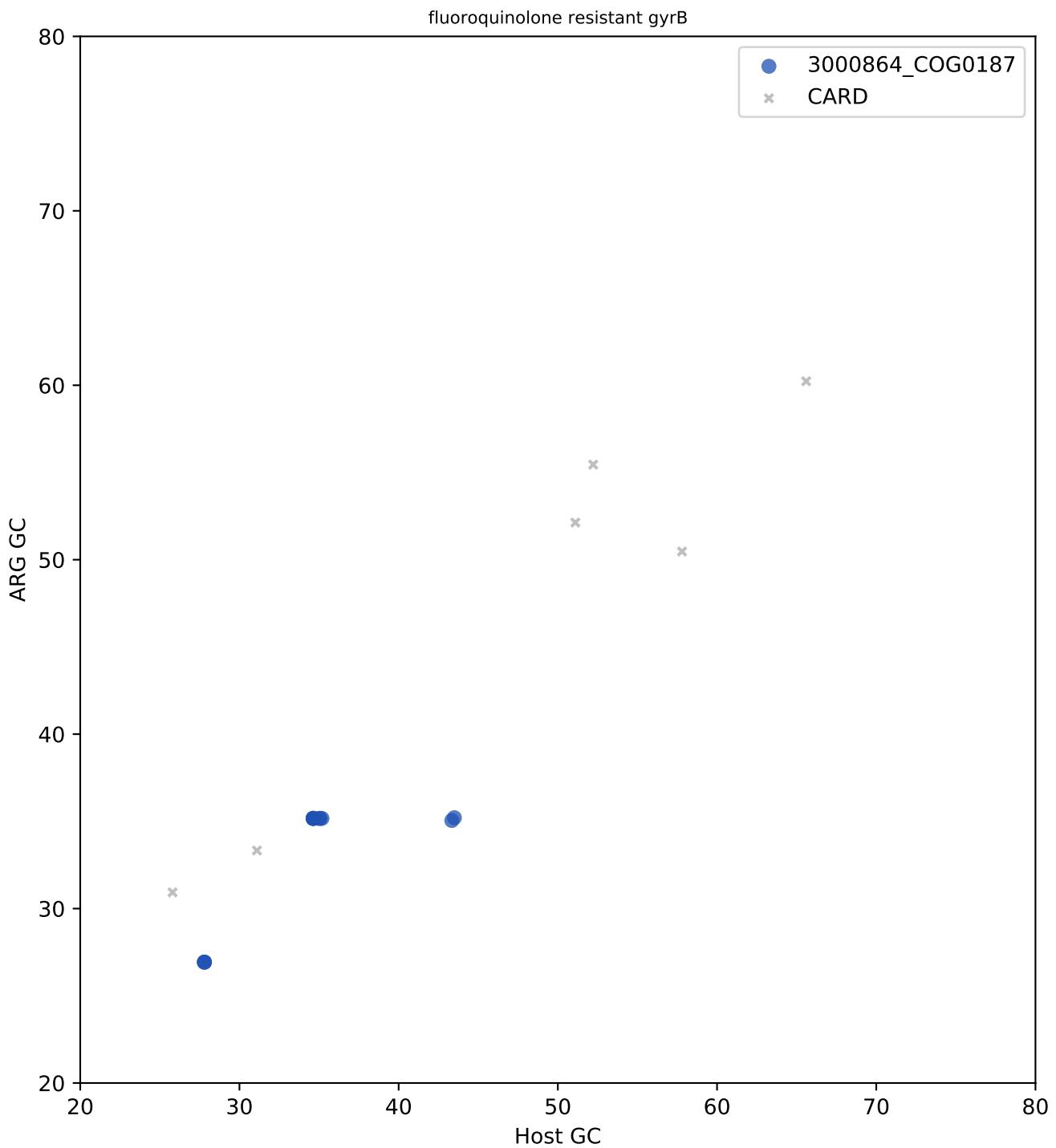
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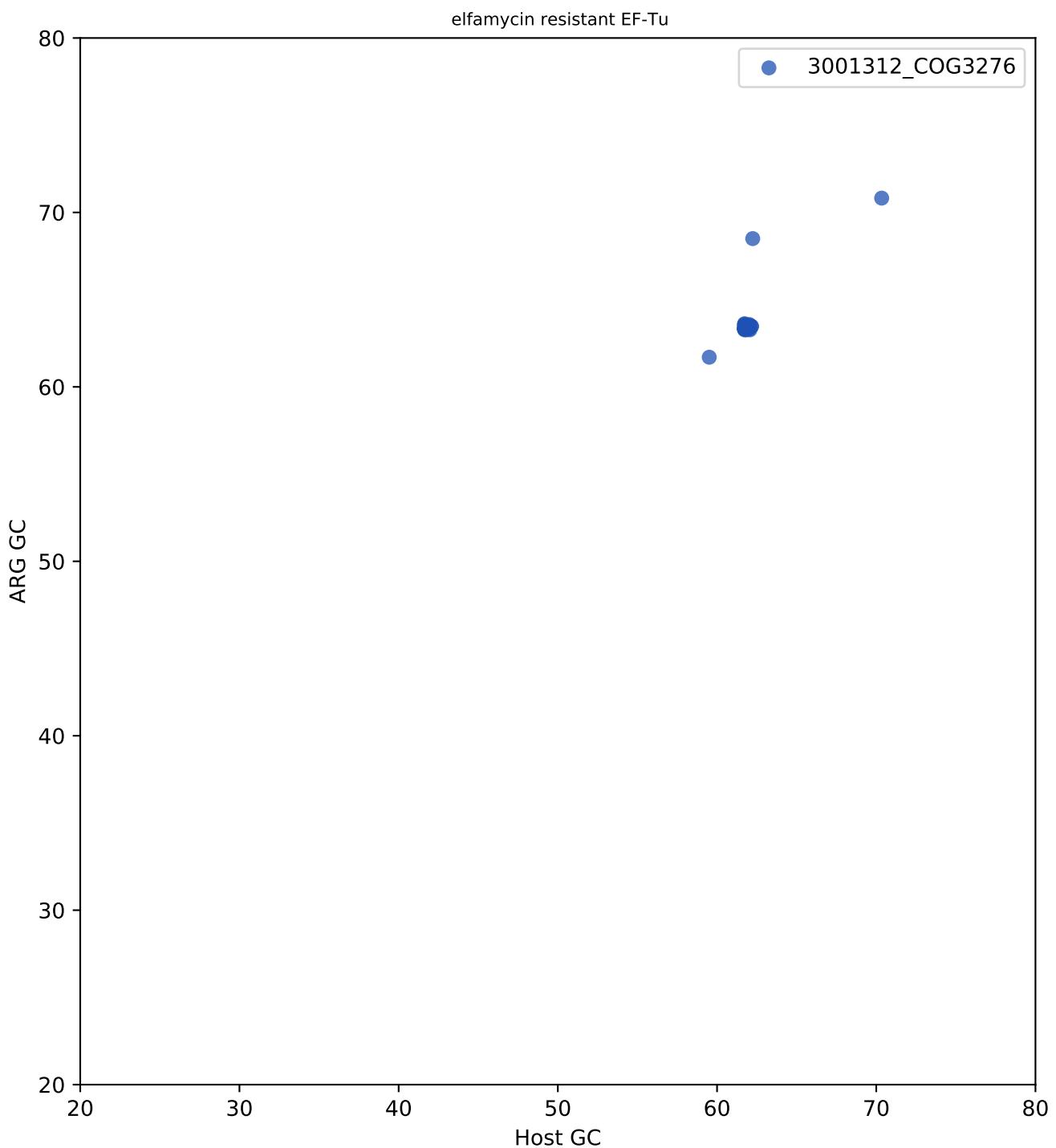
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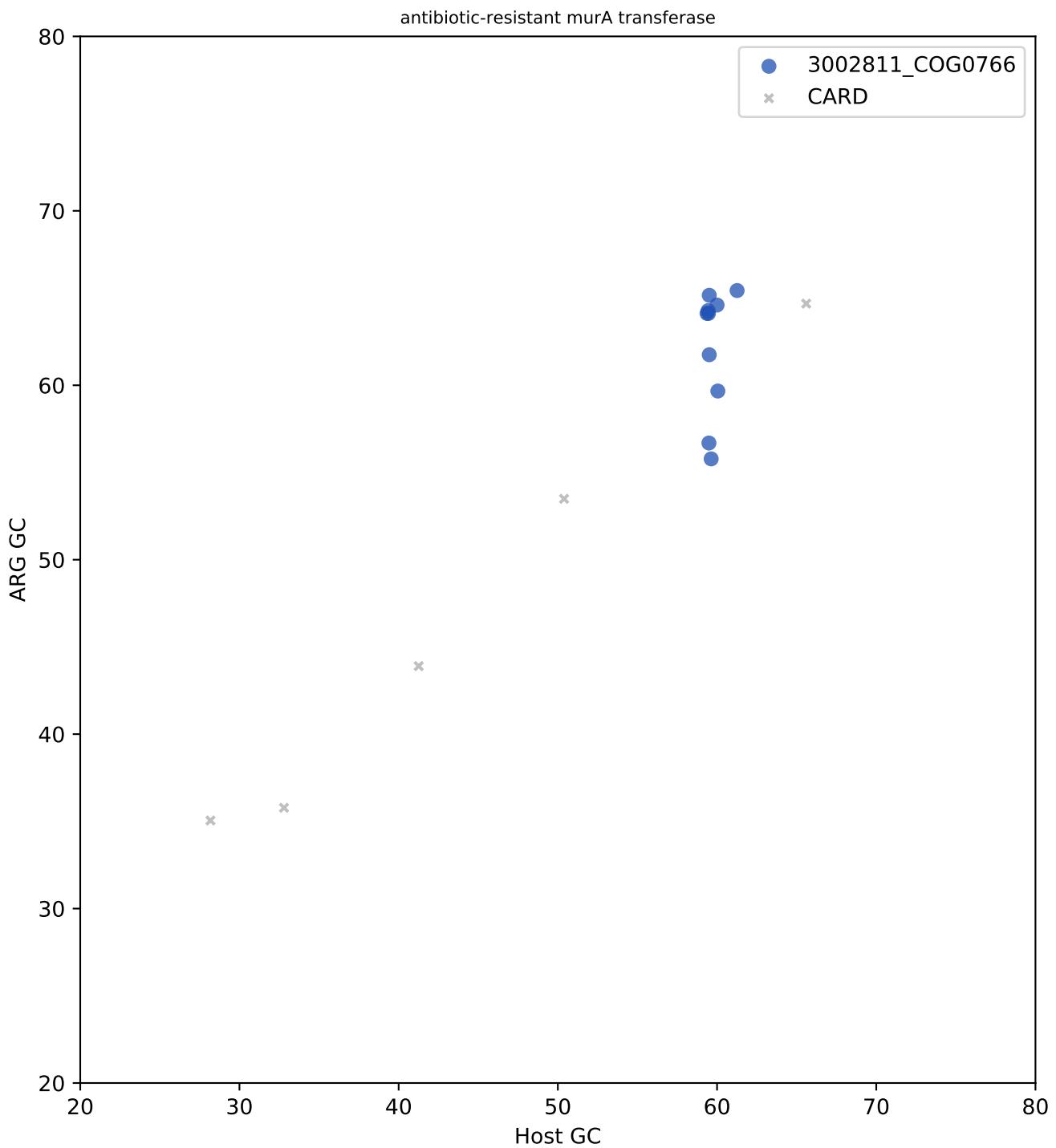
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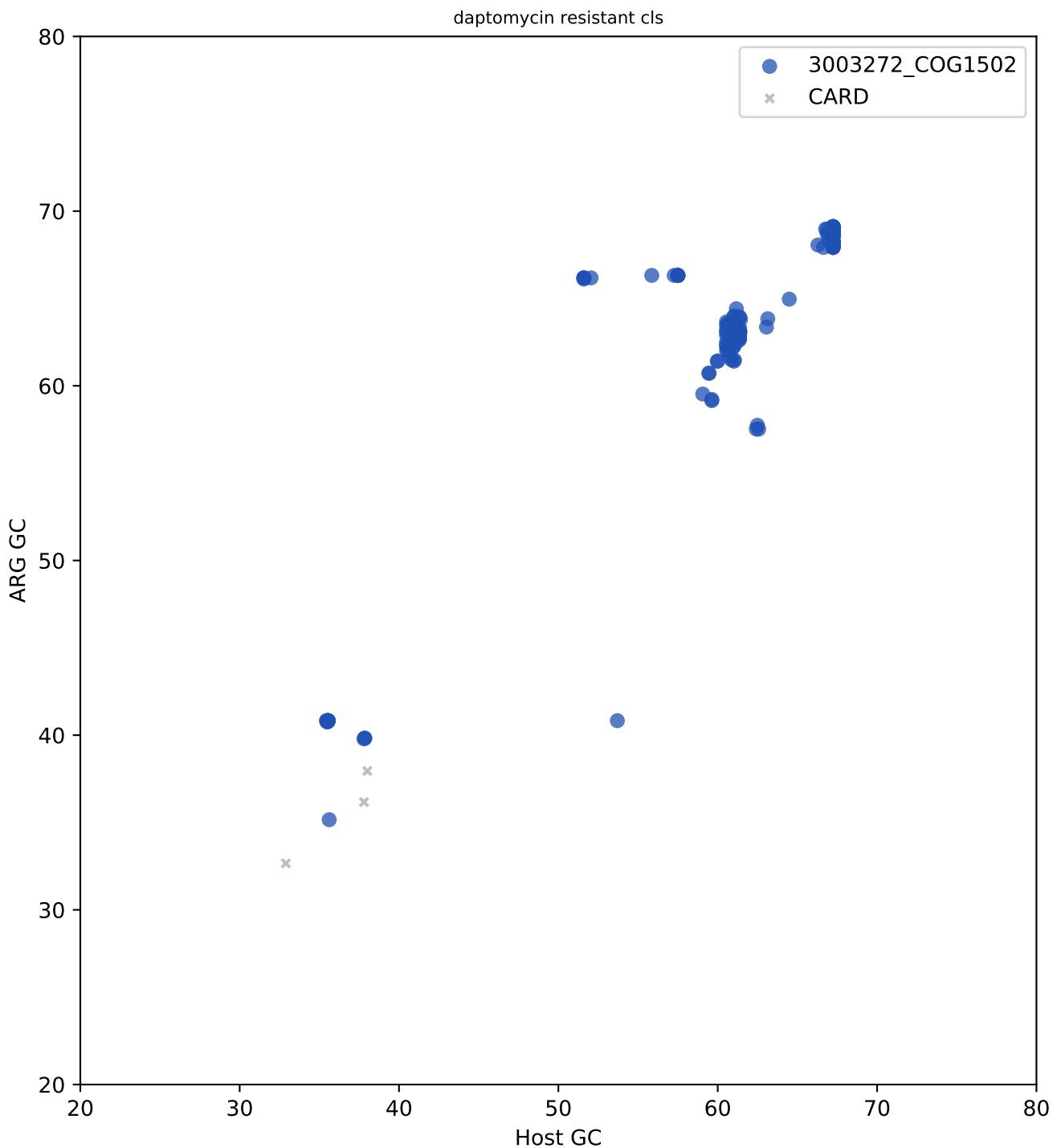
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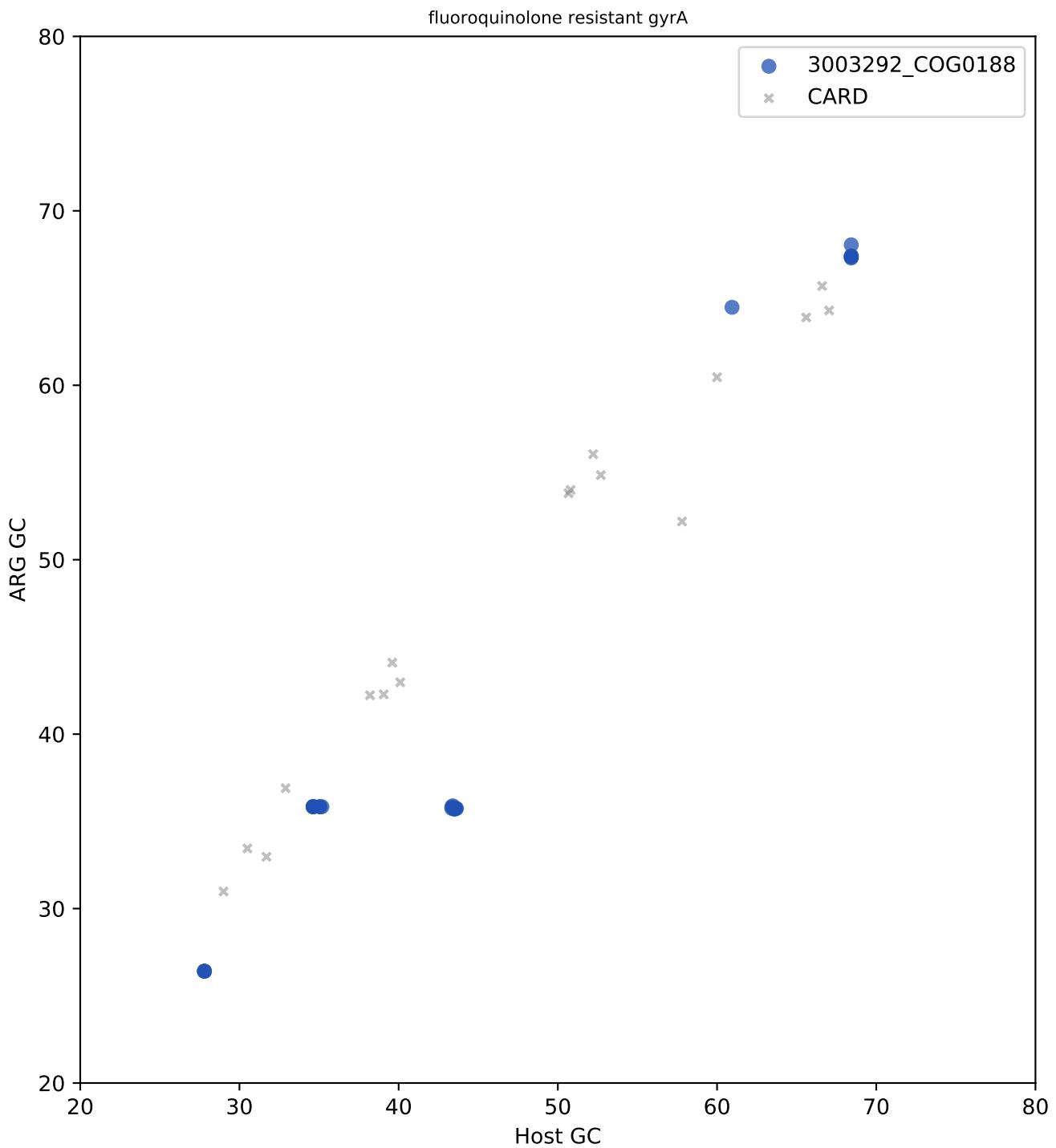
Supplementary Figure S1: (continued).



Supplementary Figure S1: (continued).

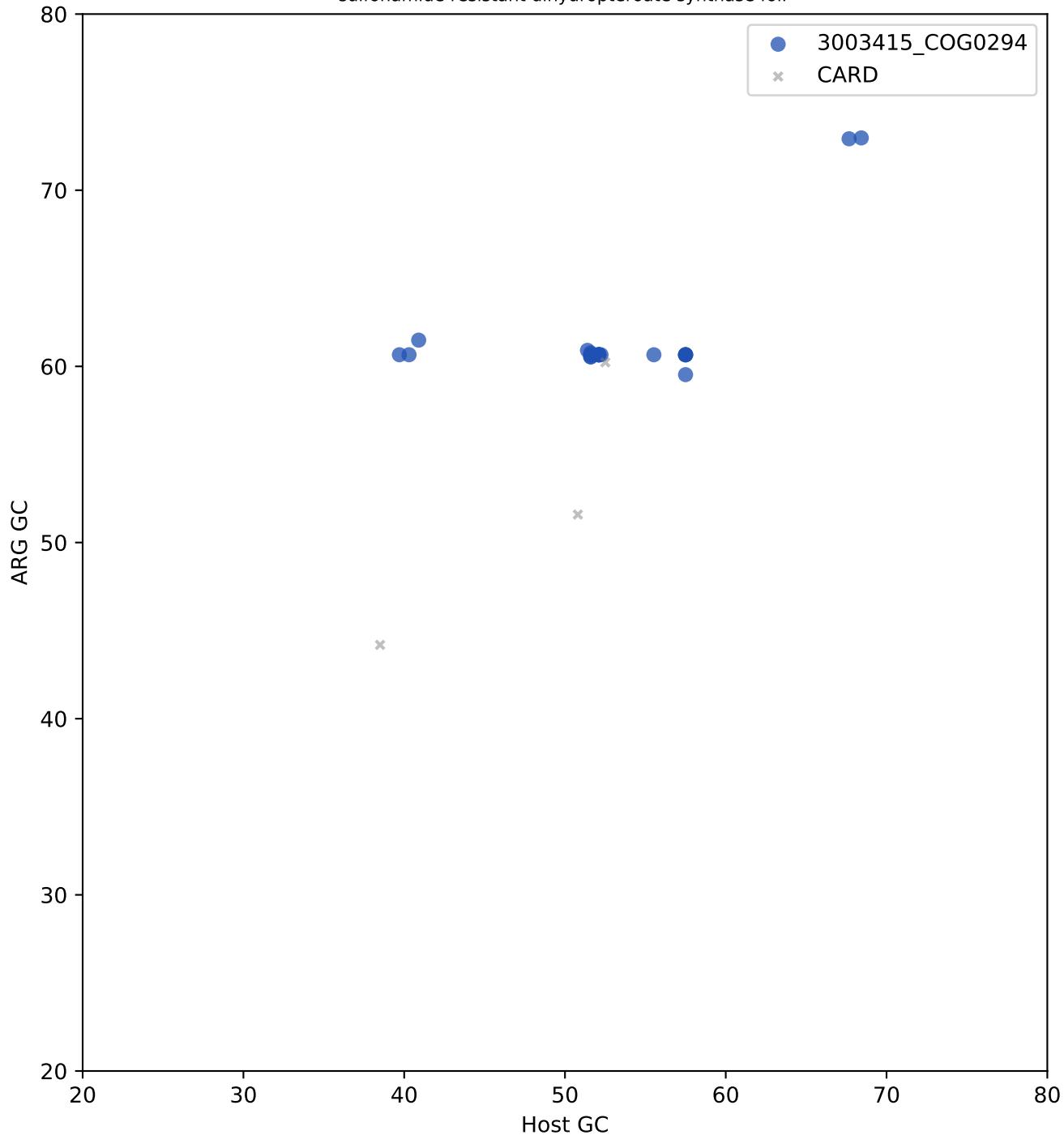


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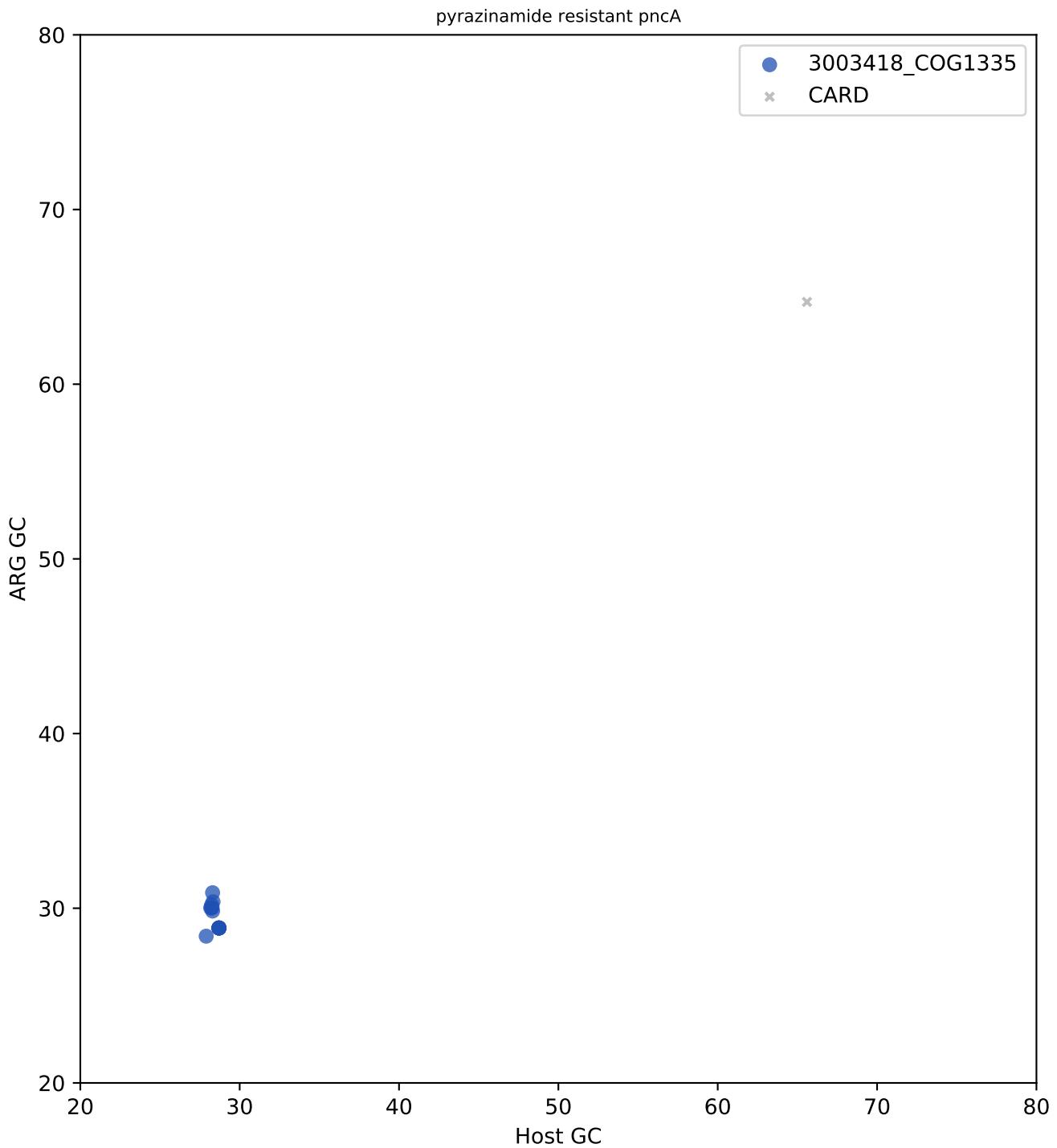


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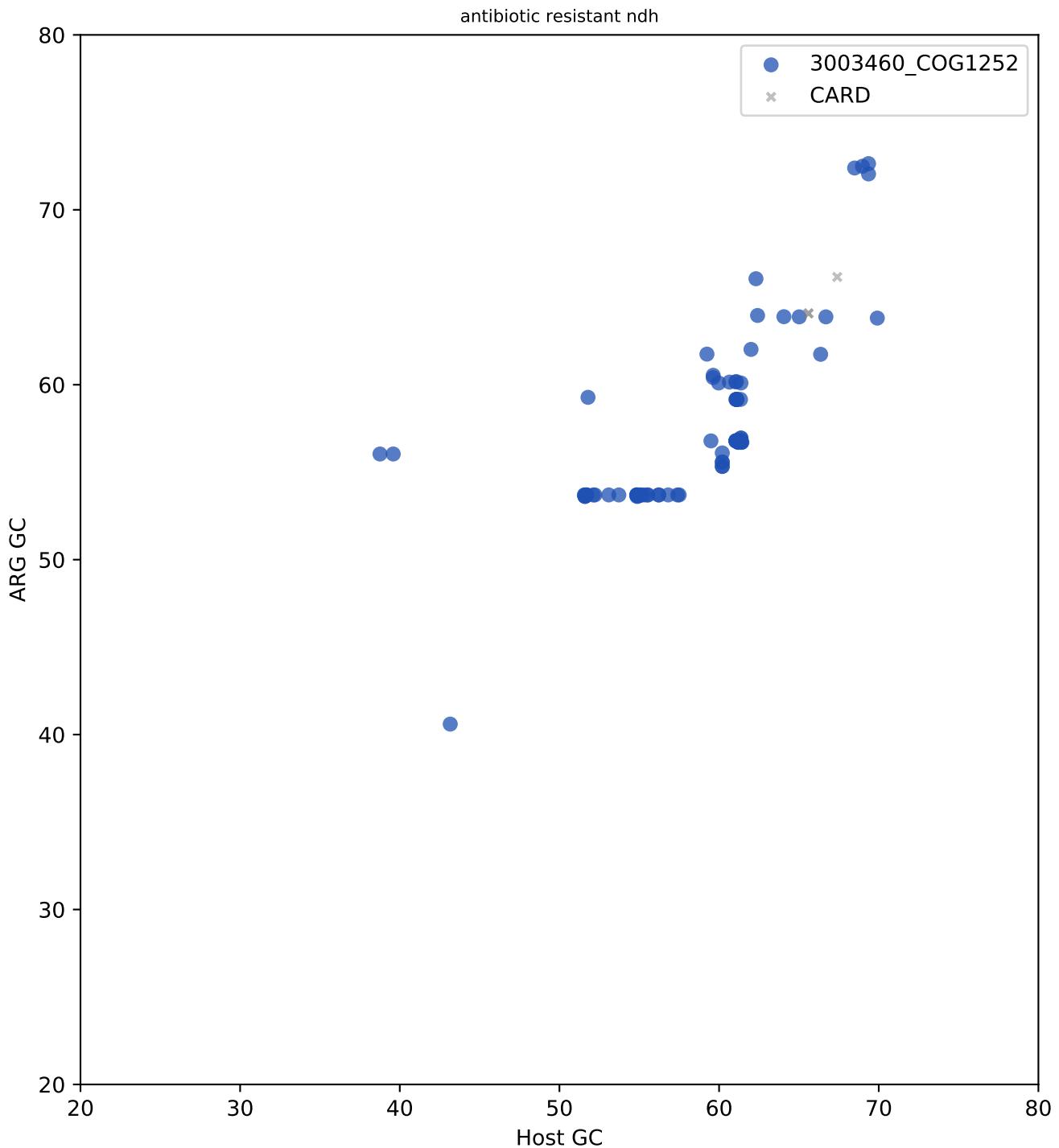
sulfonamide resistant dihydropteroate synthase folP



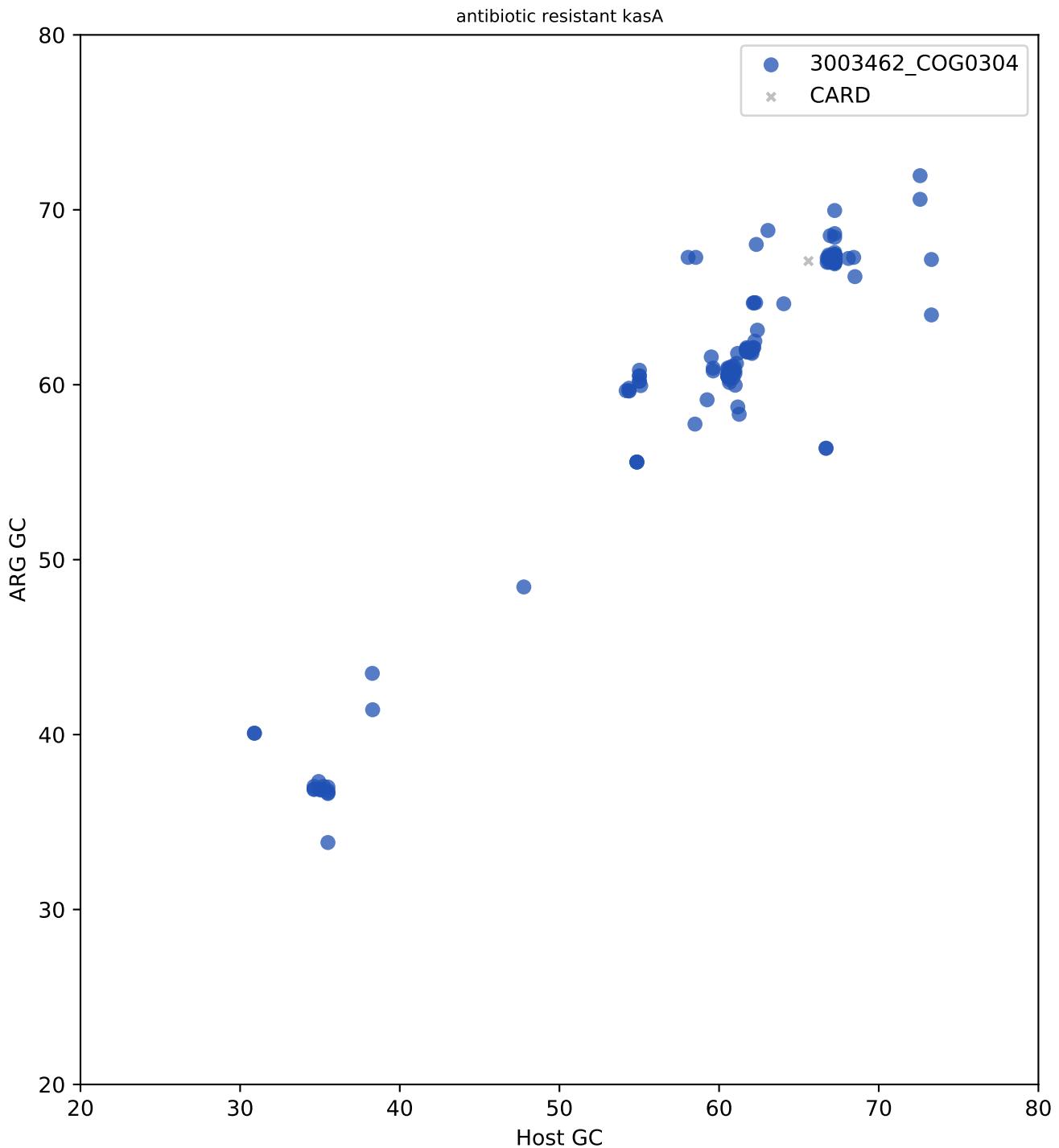
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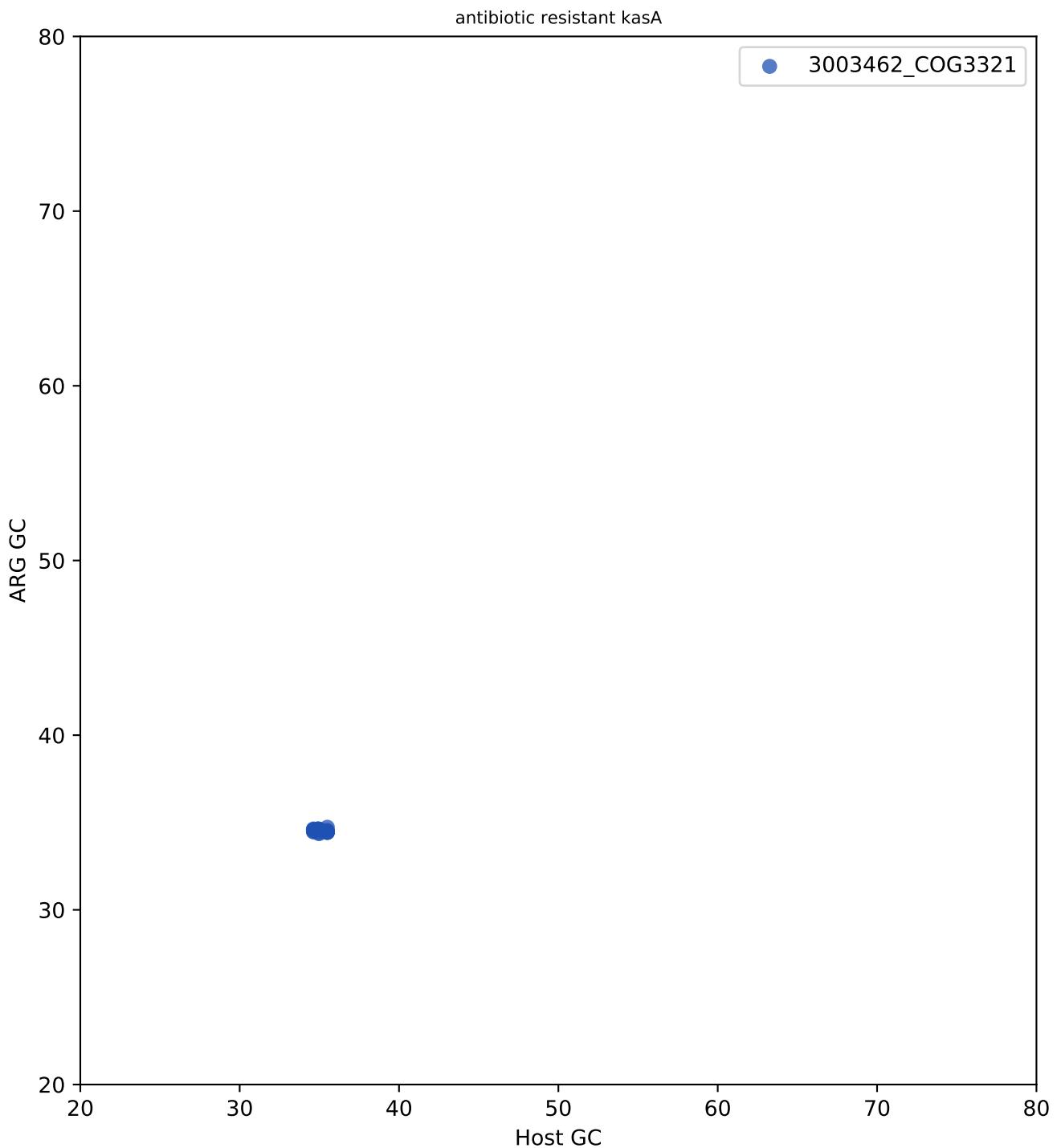
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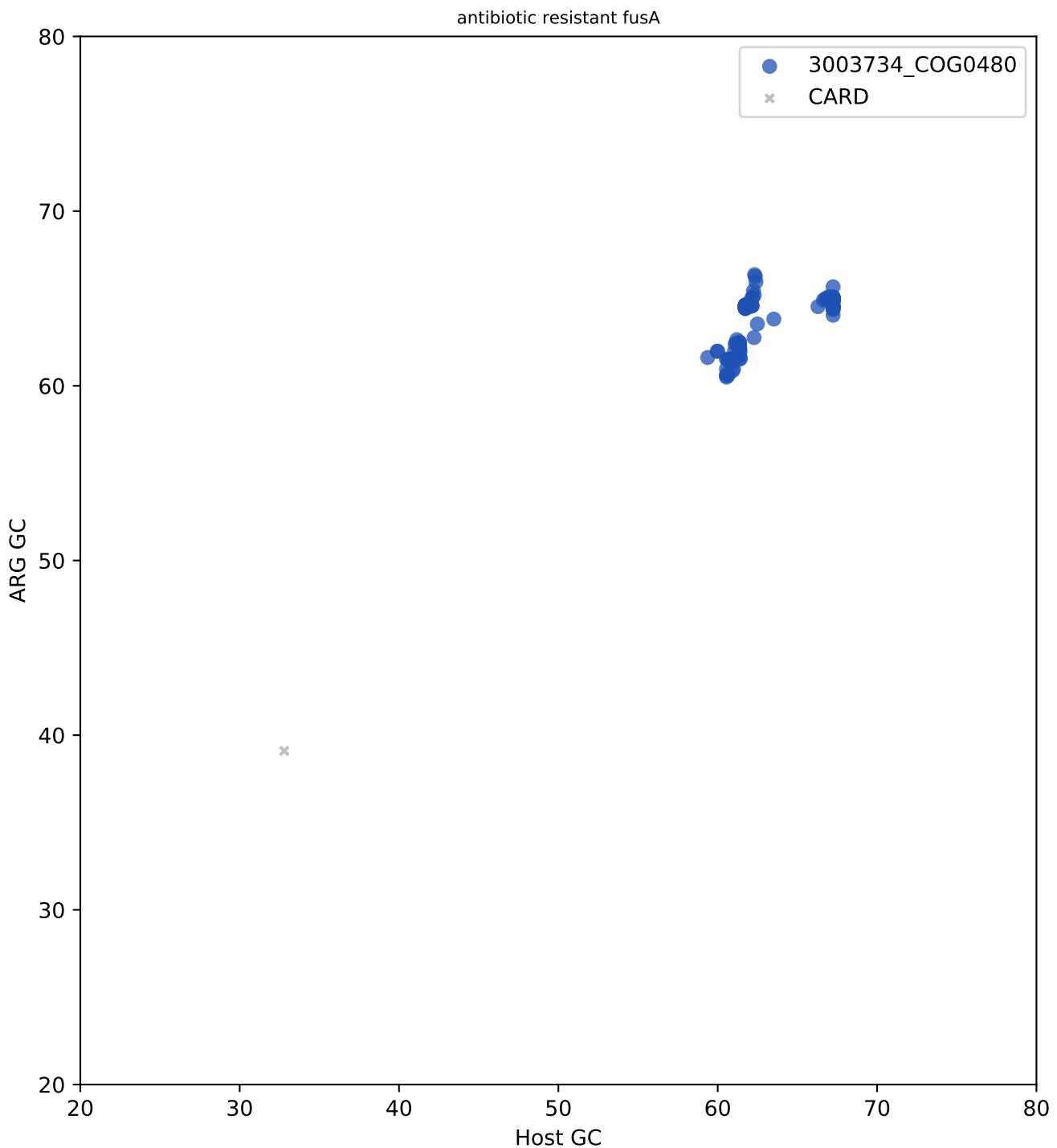
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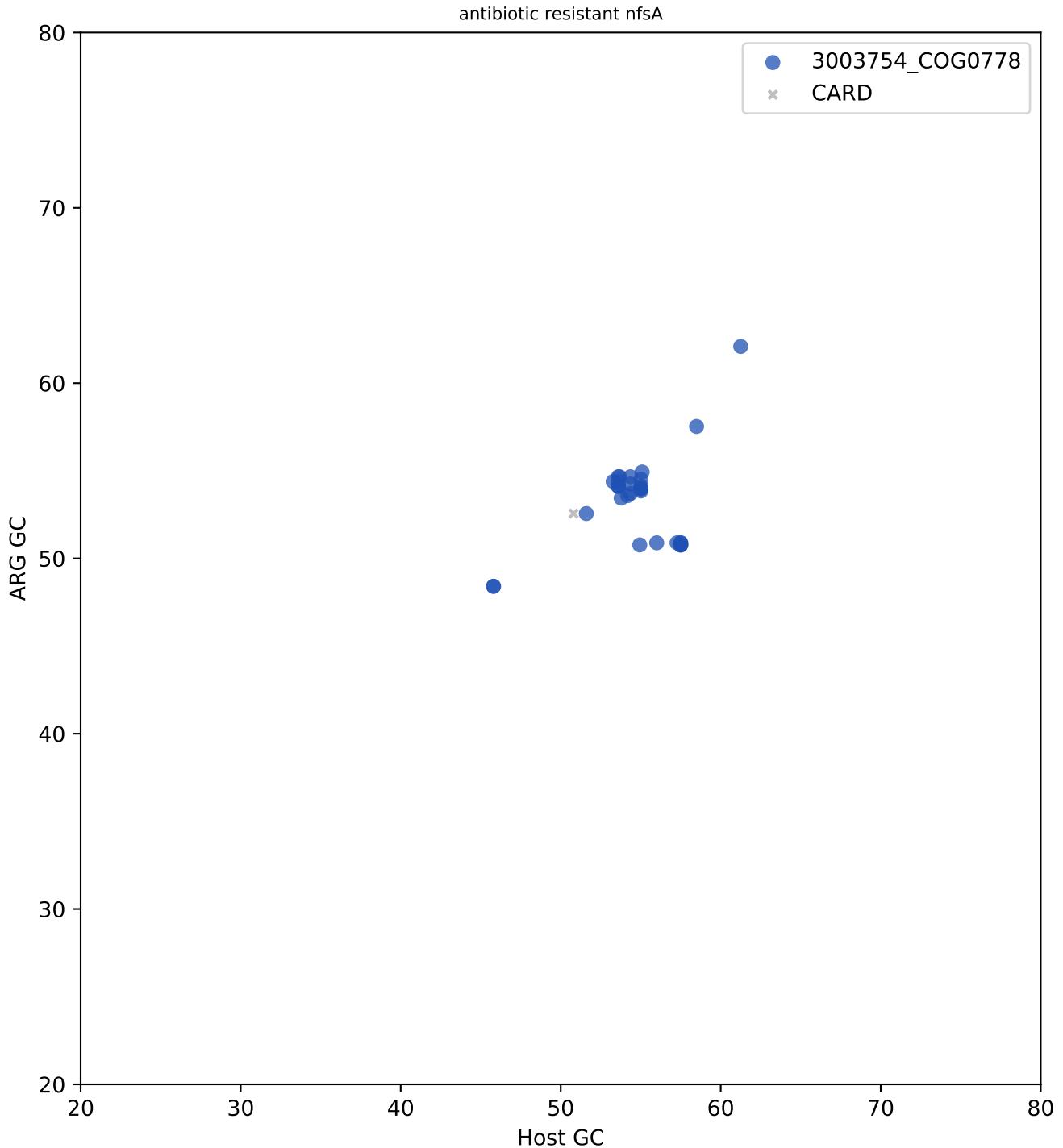
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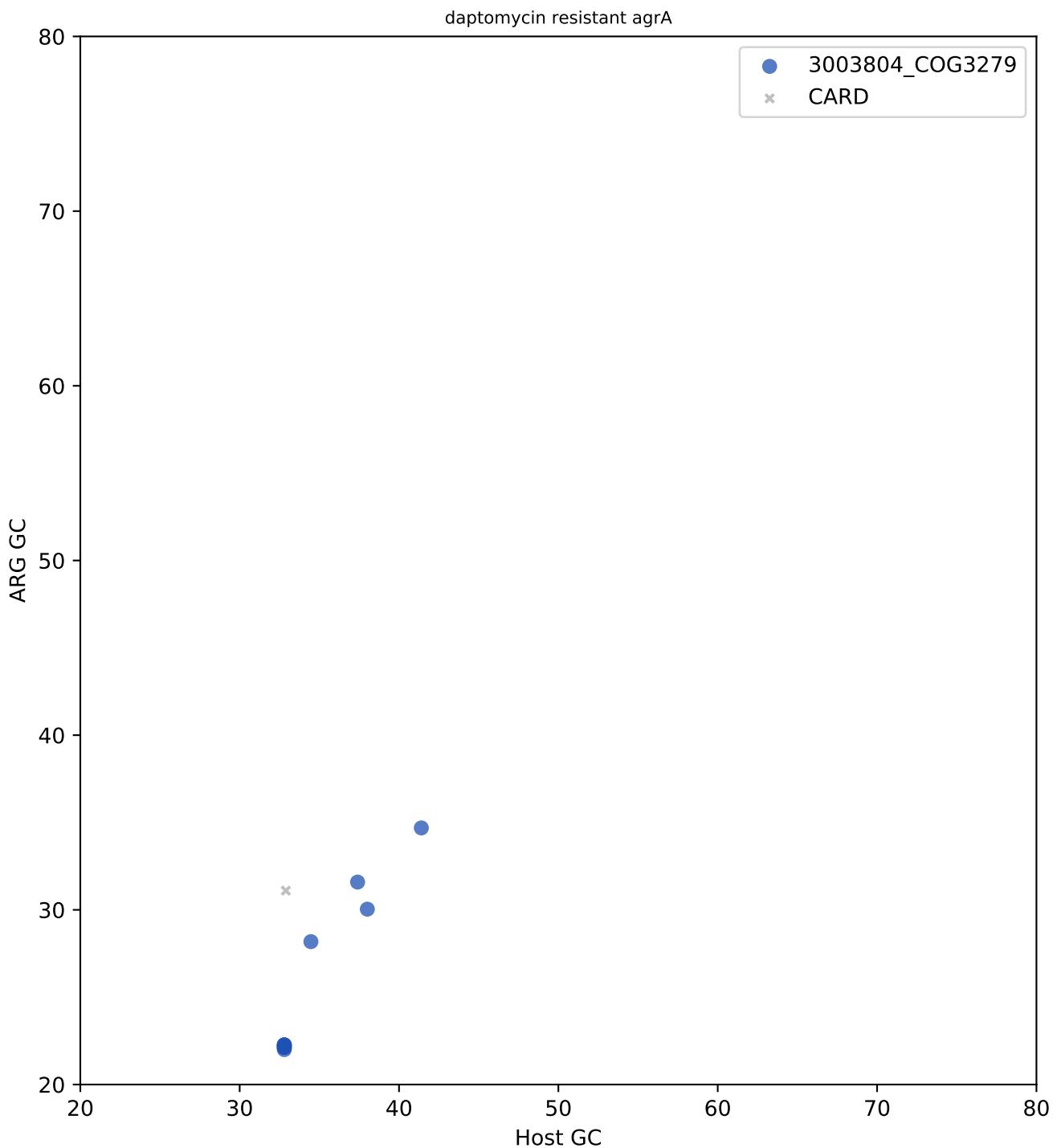
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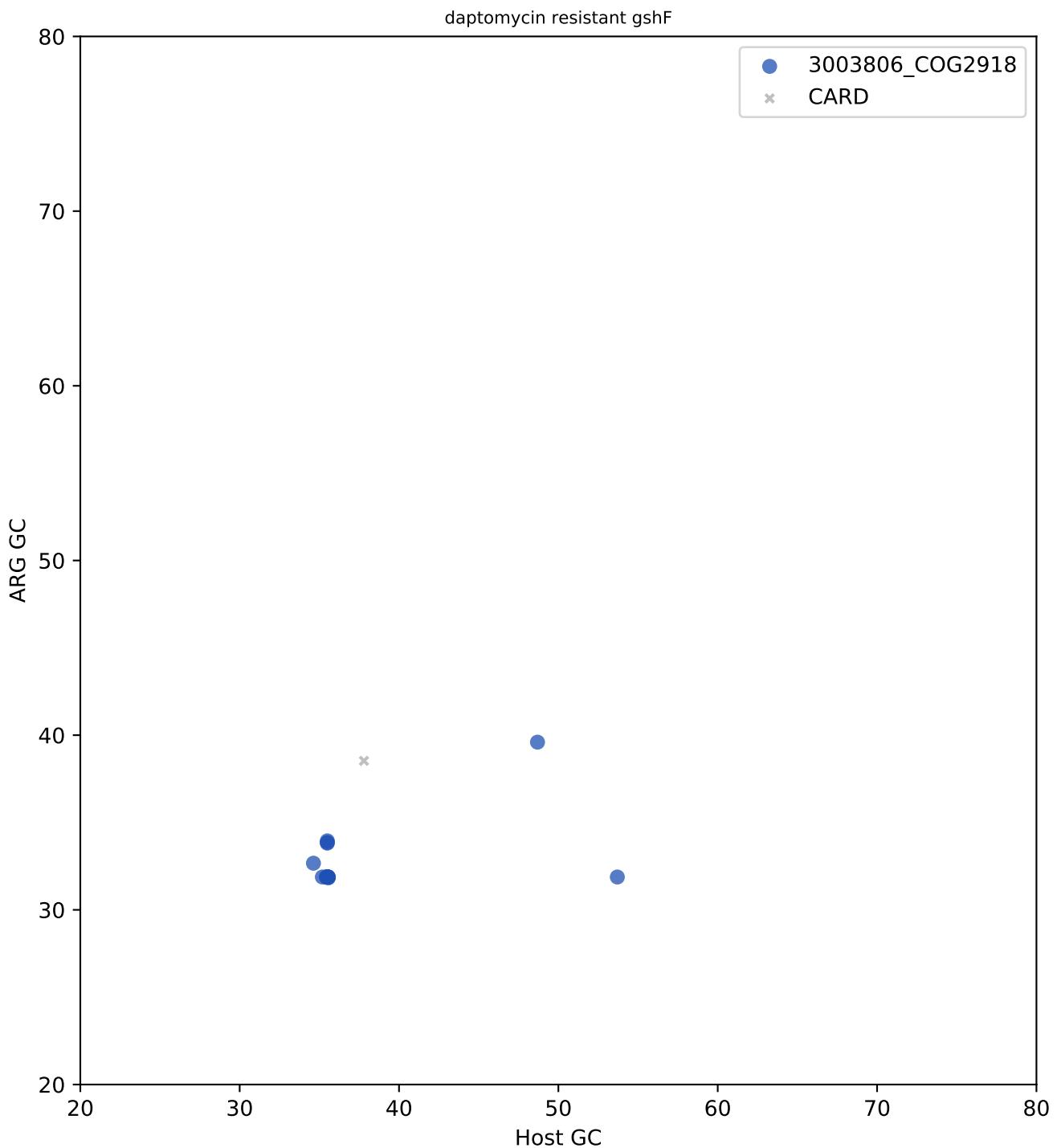
Supplementary Figure S1: (continued).



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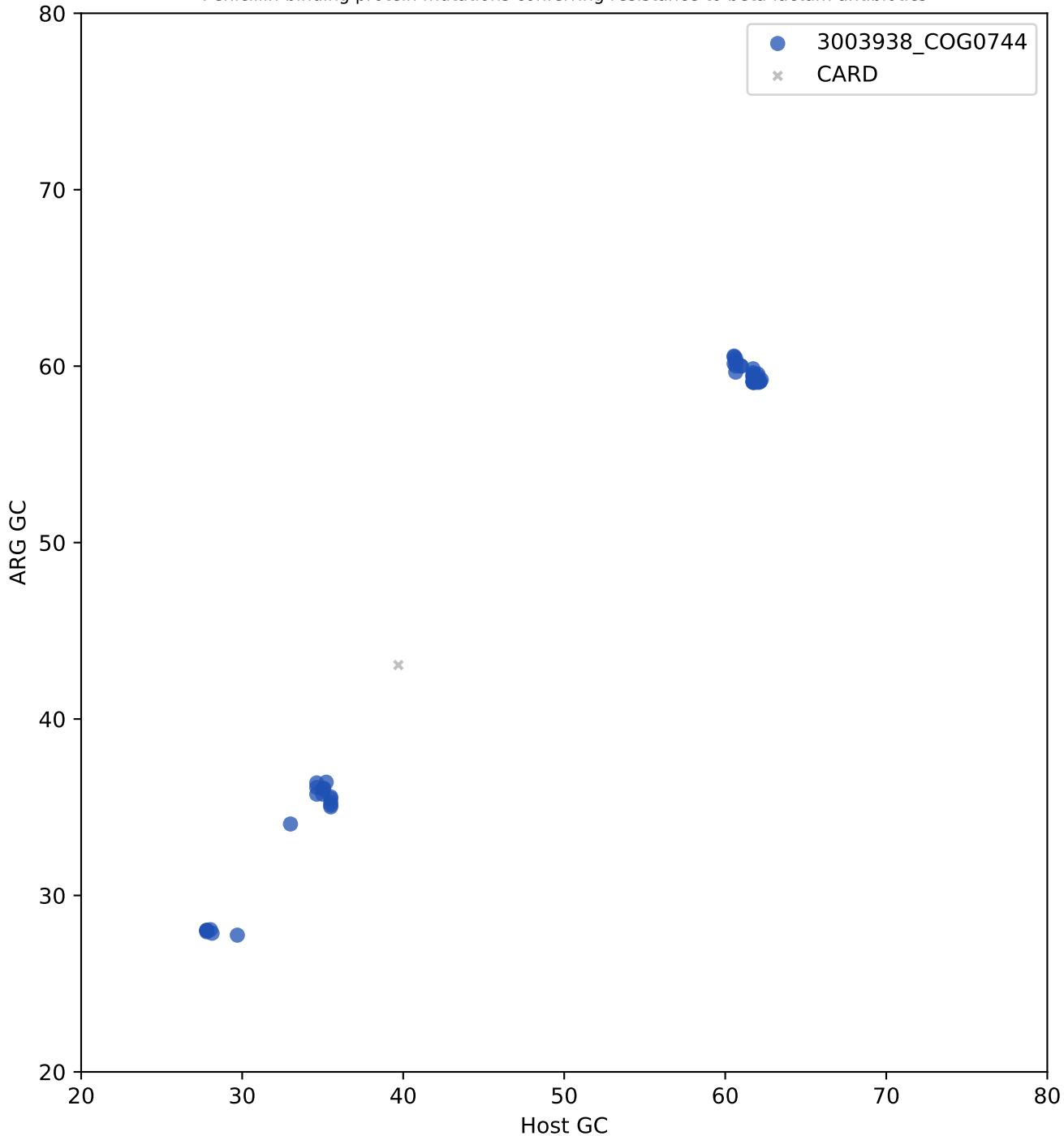


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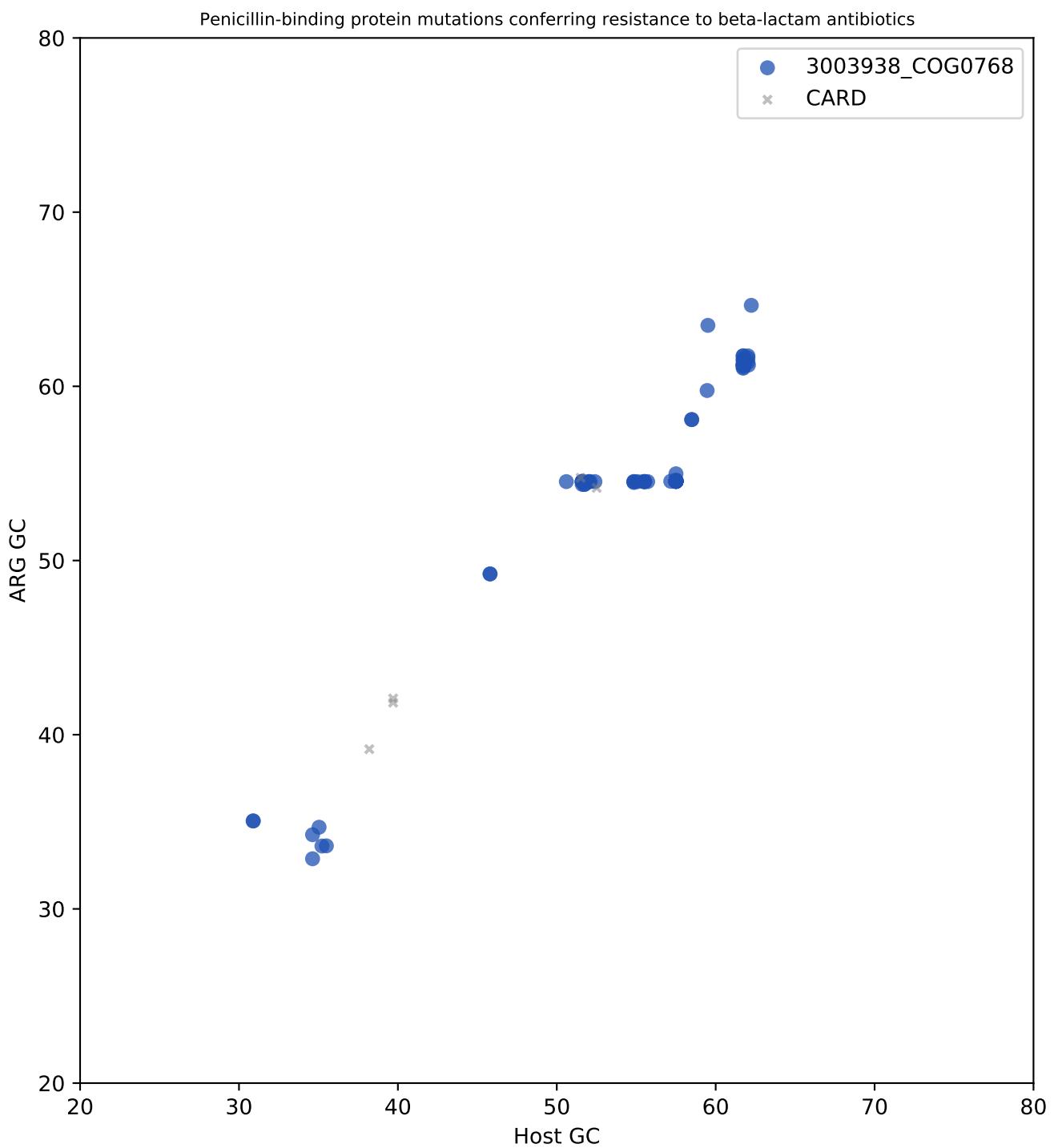


Supplementary Figure S1: (continued).

Penicillin-binding protein mutations conferring resistance to beta-lactam antibiotics

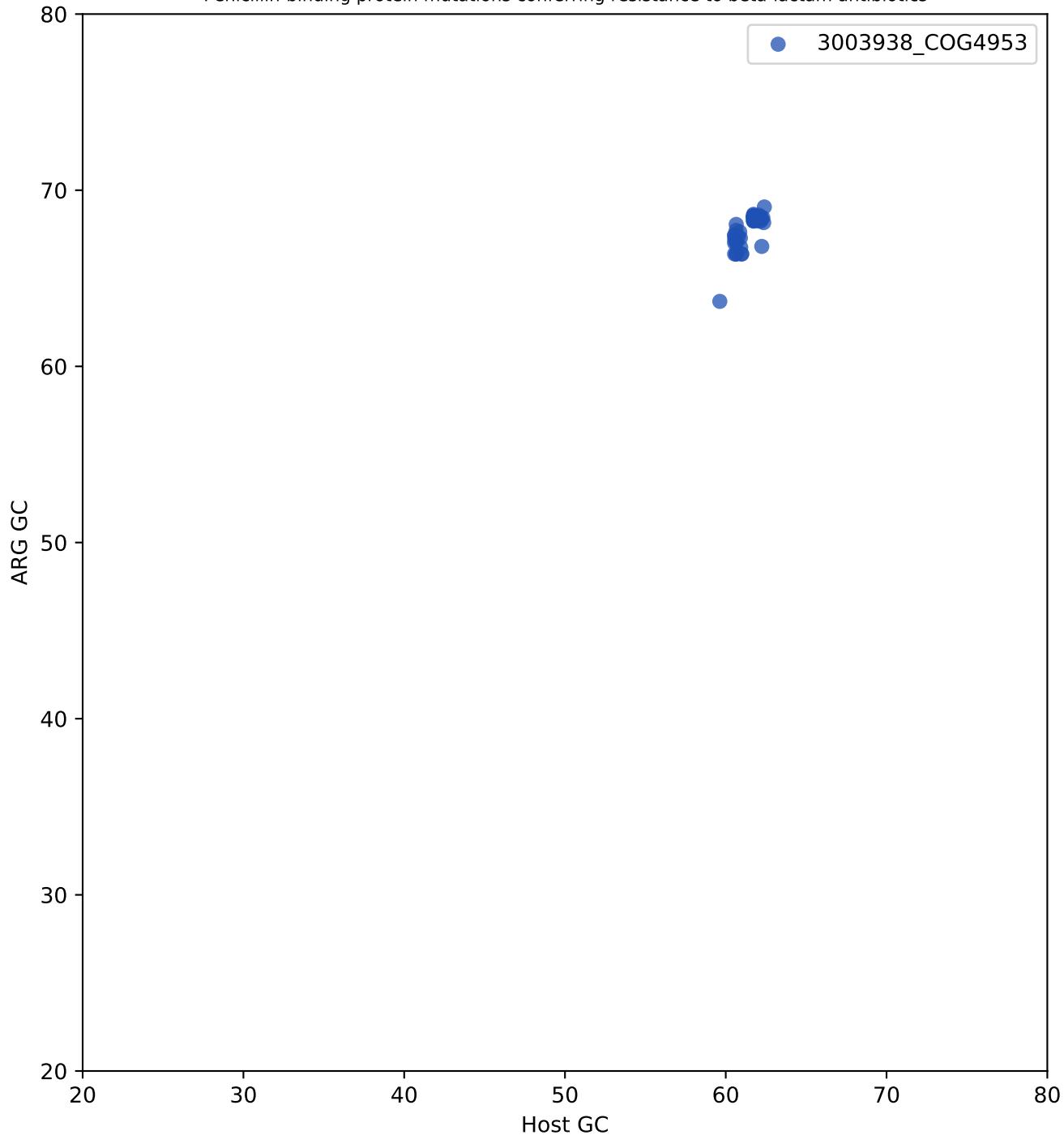


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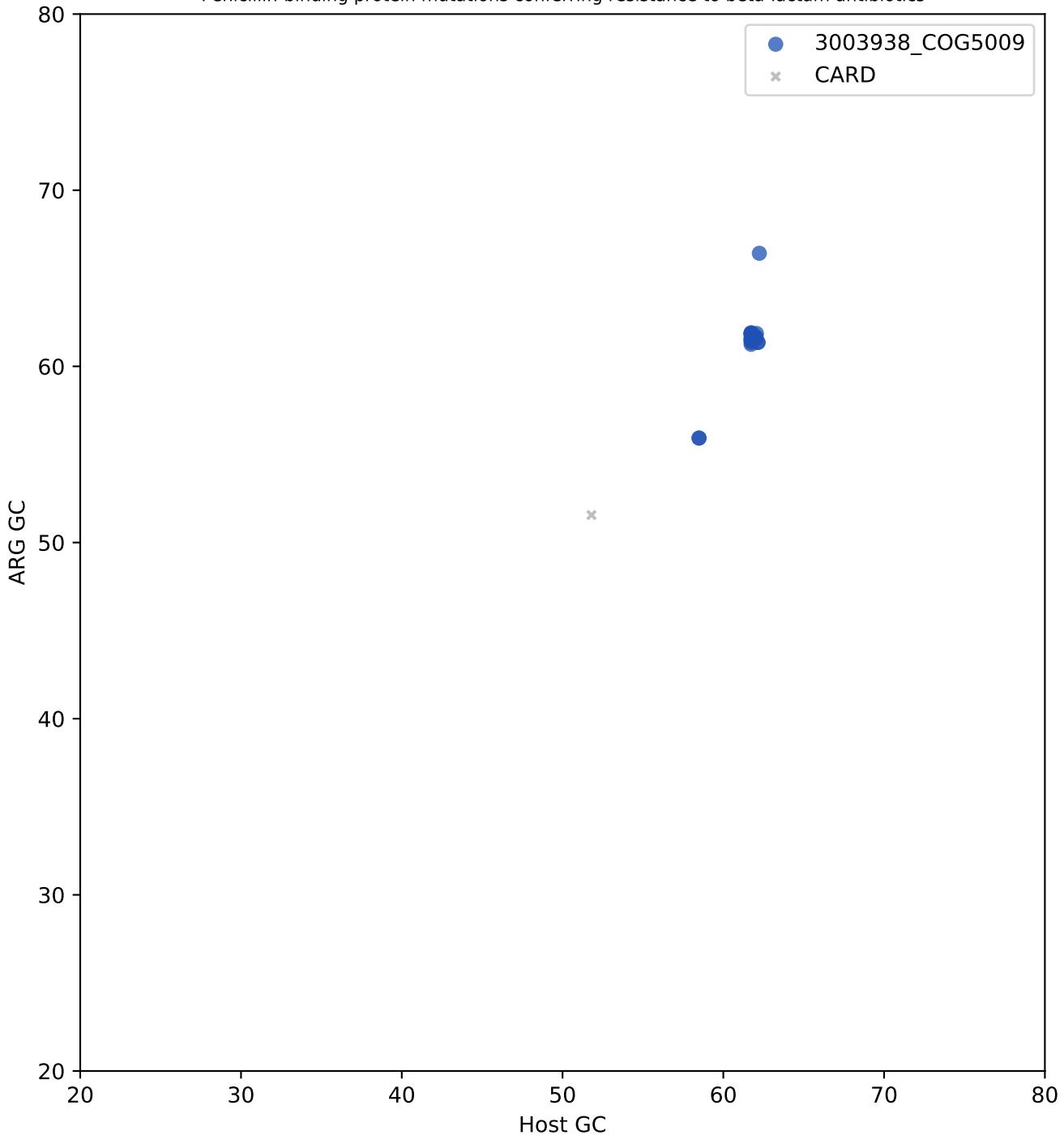
Supplementary Figure S1: (continued).

Penicillin-binding protein mutations conferring resistance to beta-lactam antibiotics

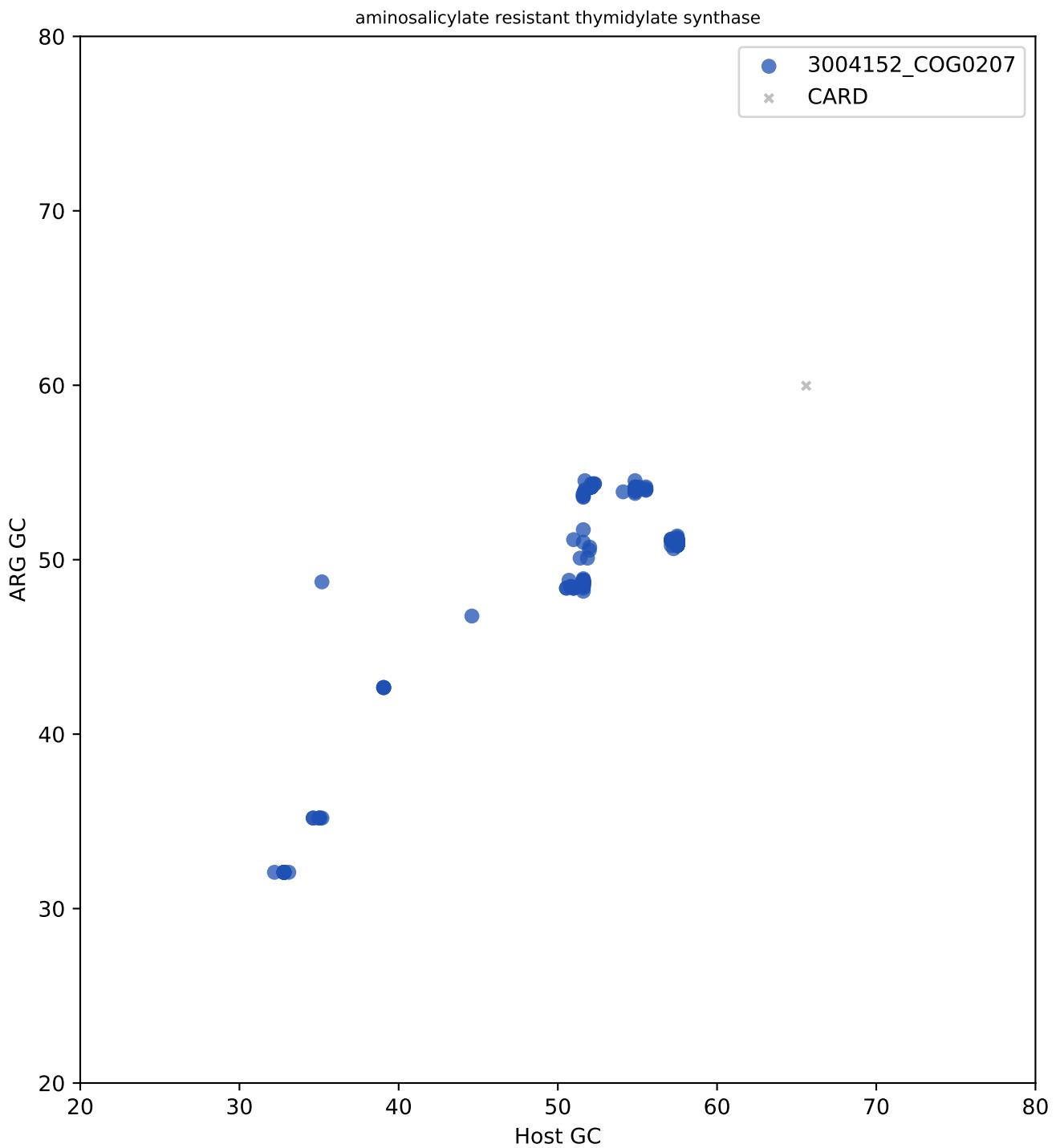


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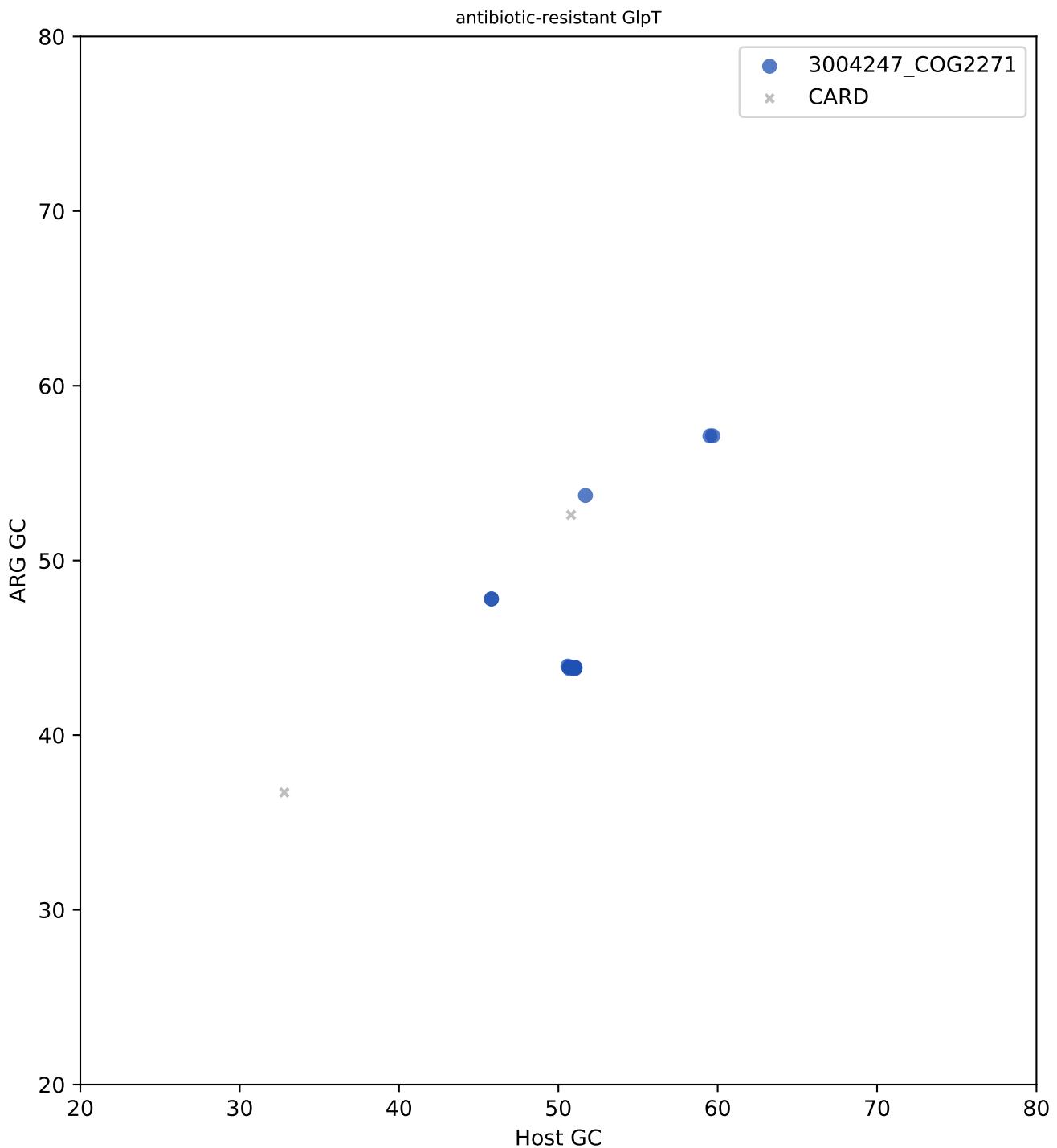
Penicillin-binding protein mutations conferring resistance to beta-lactam antibiotics



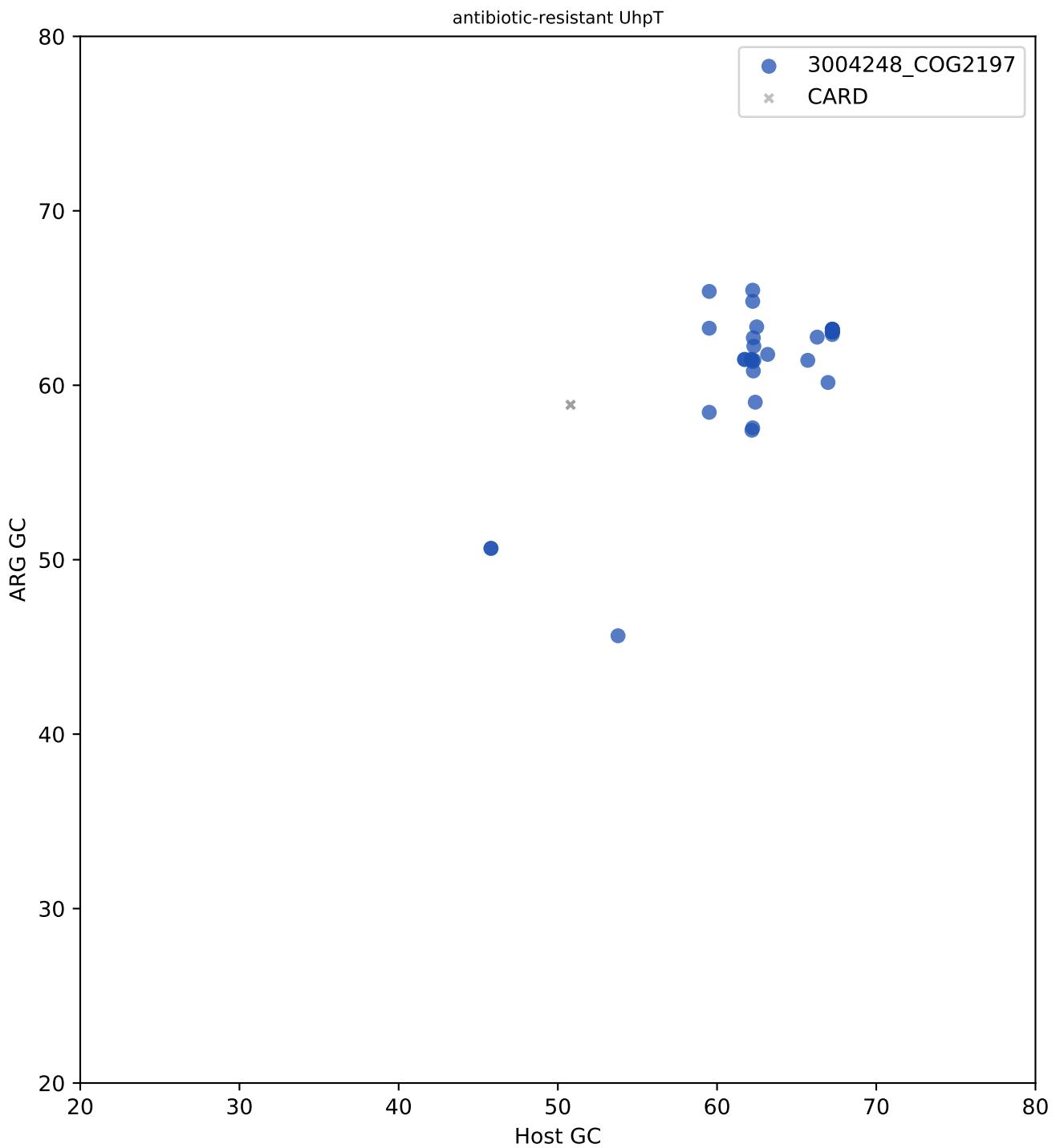
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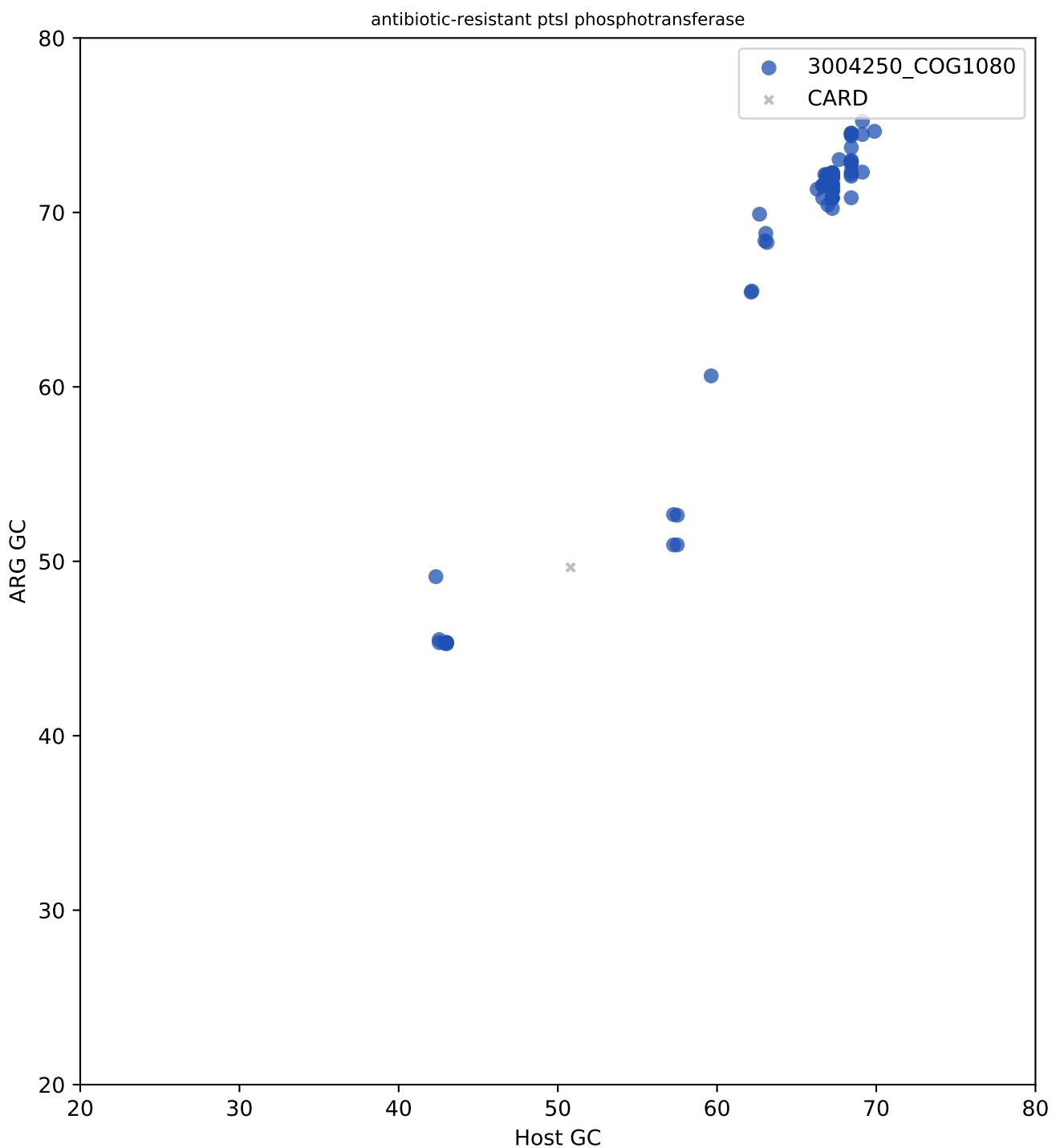
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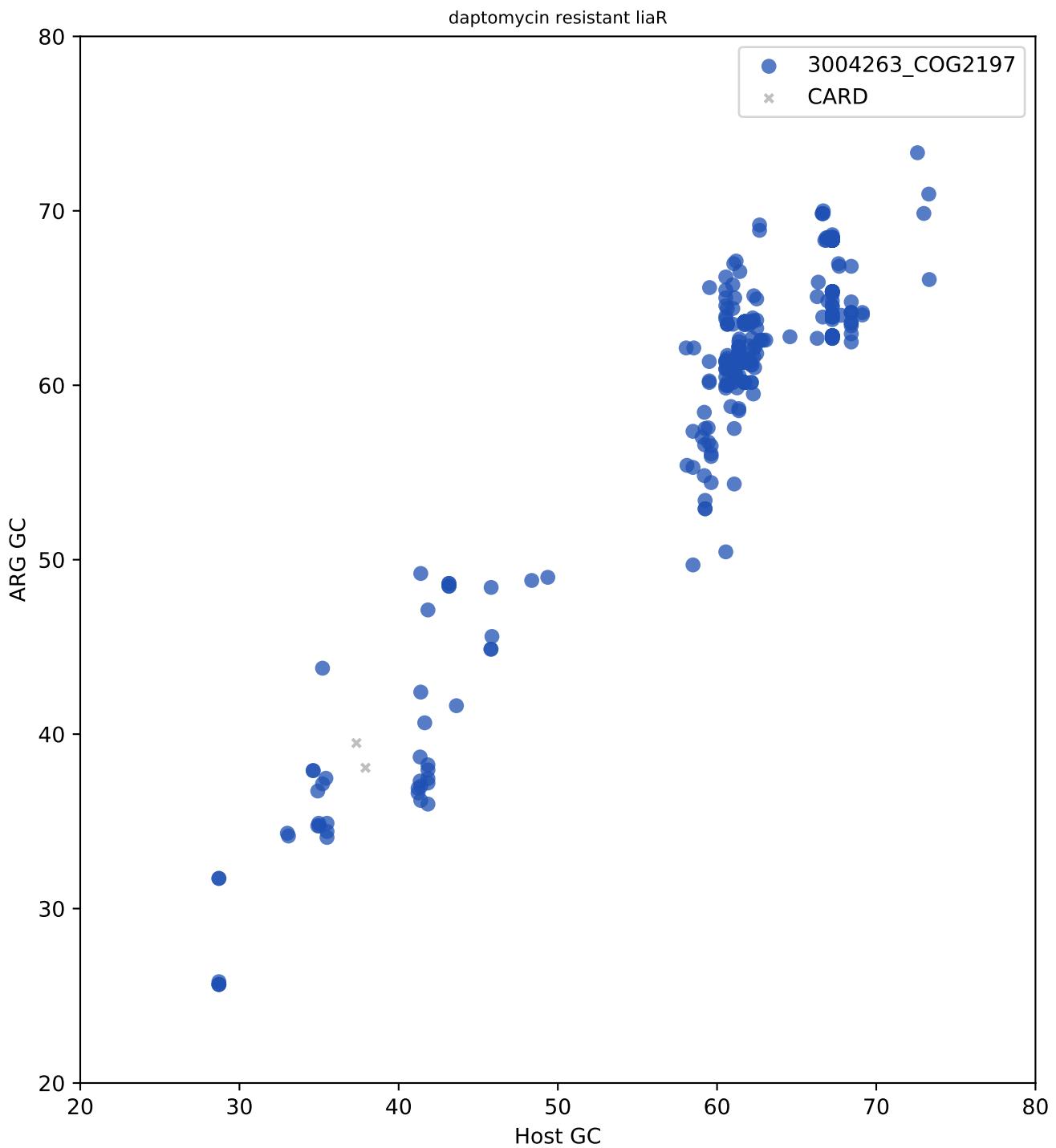
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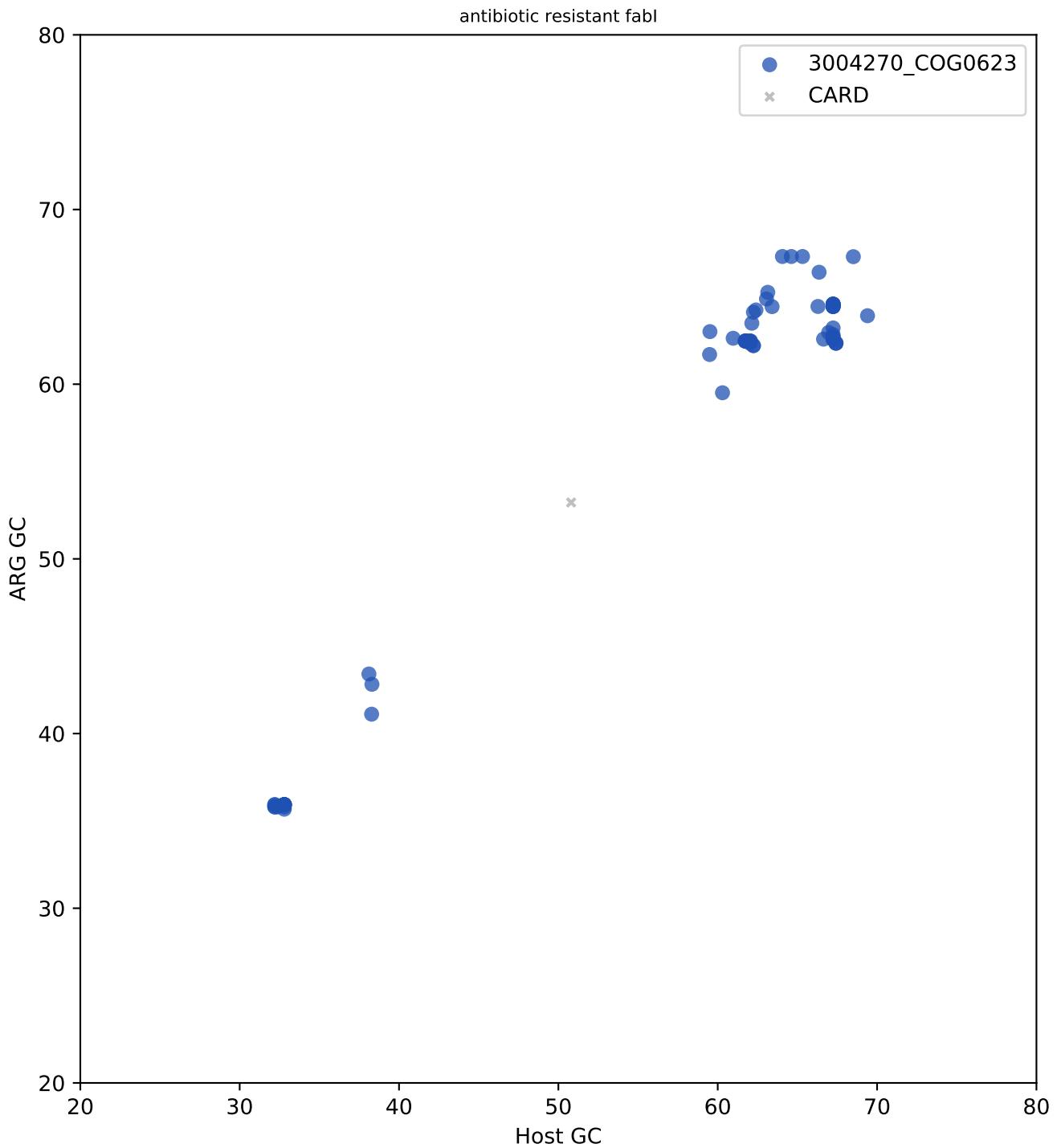
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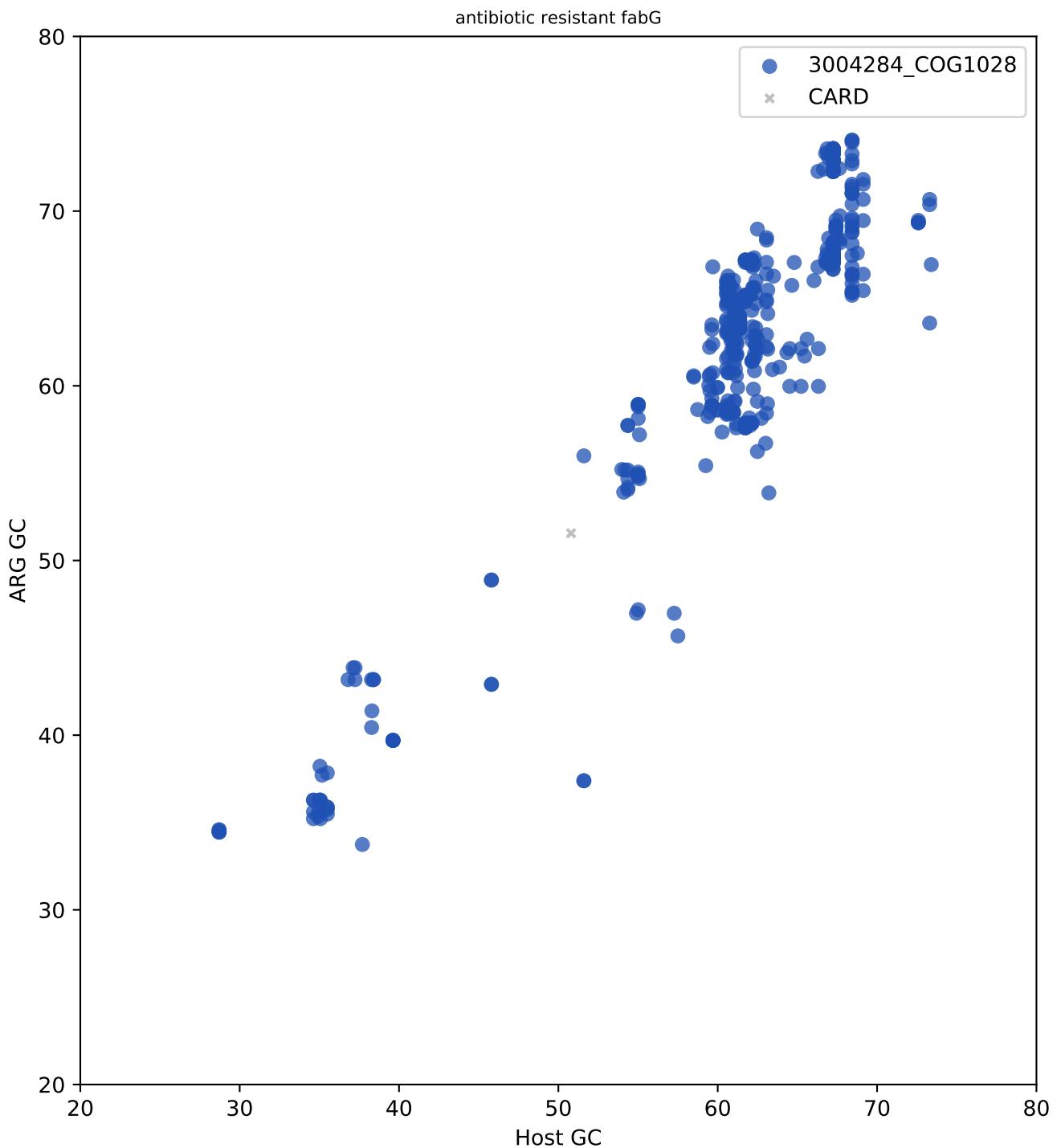
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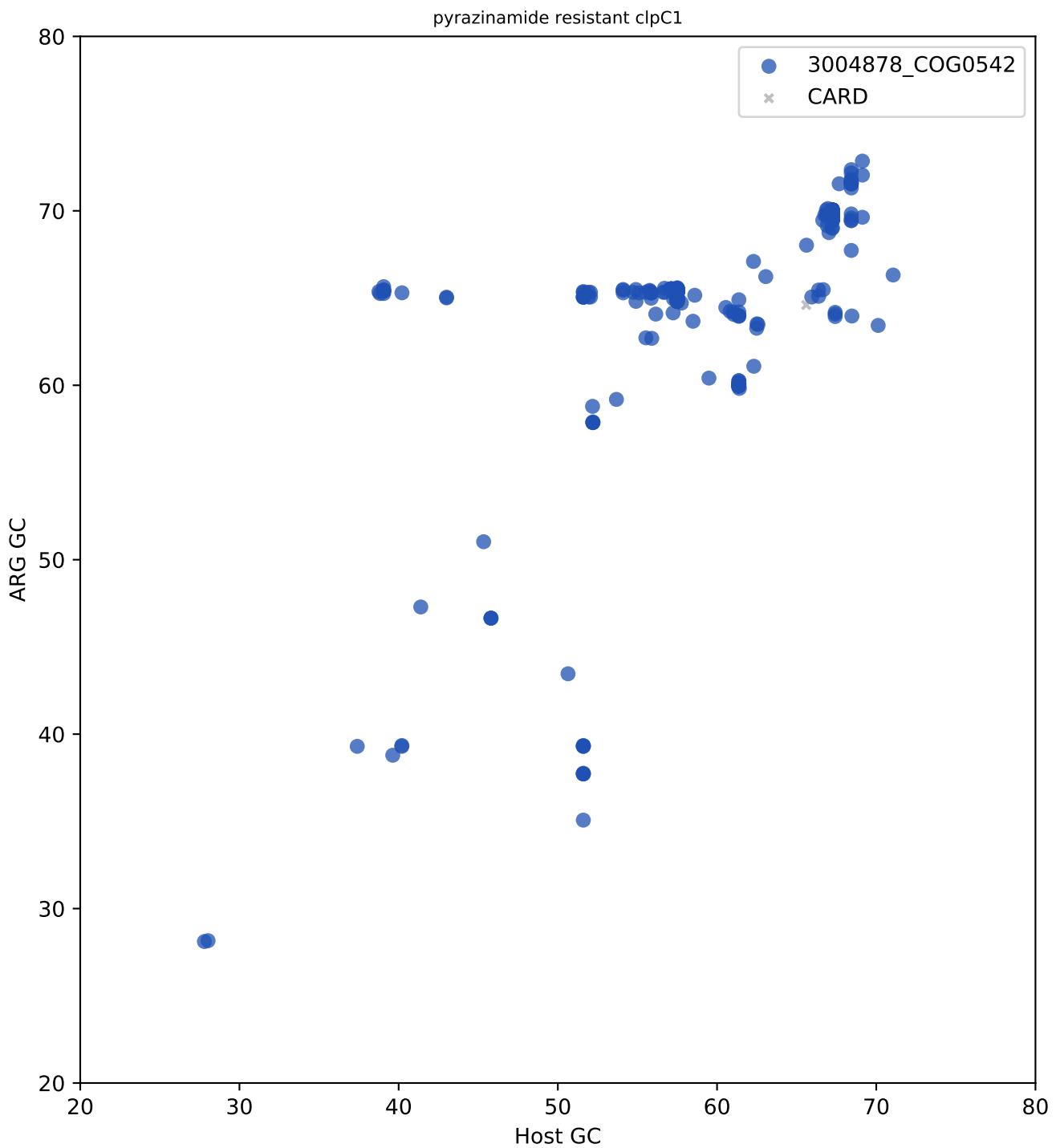
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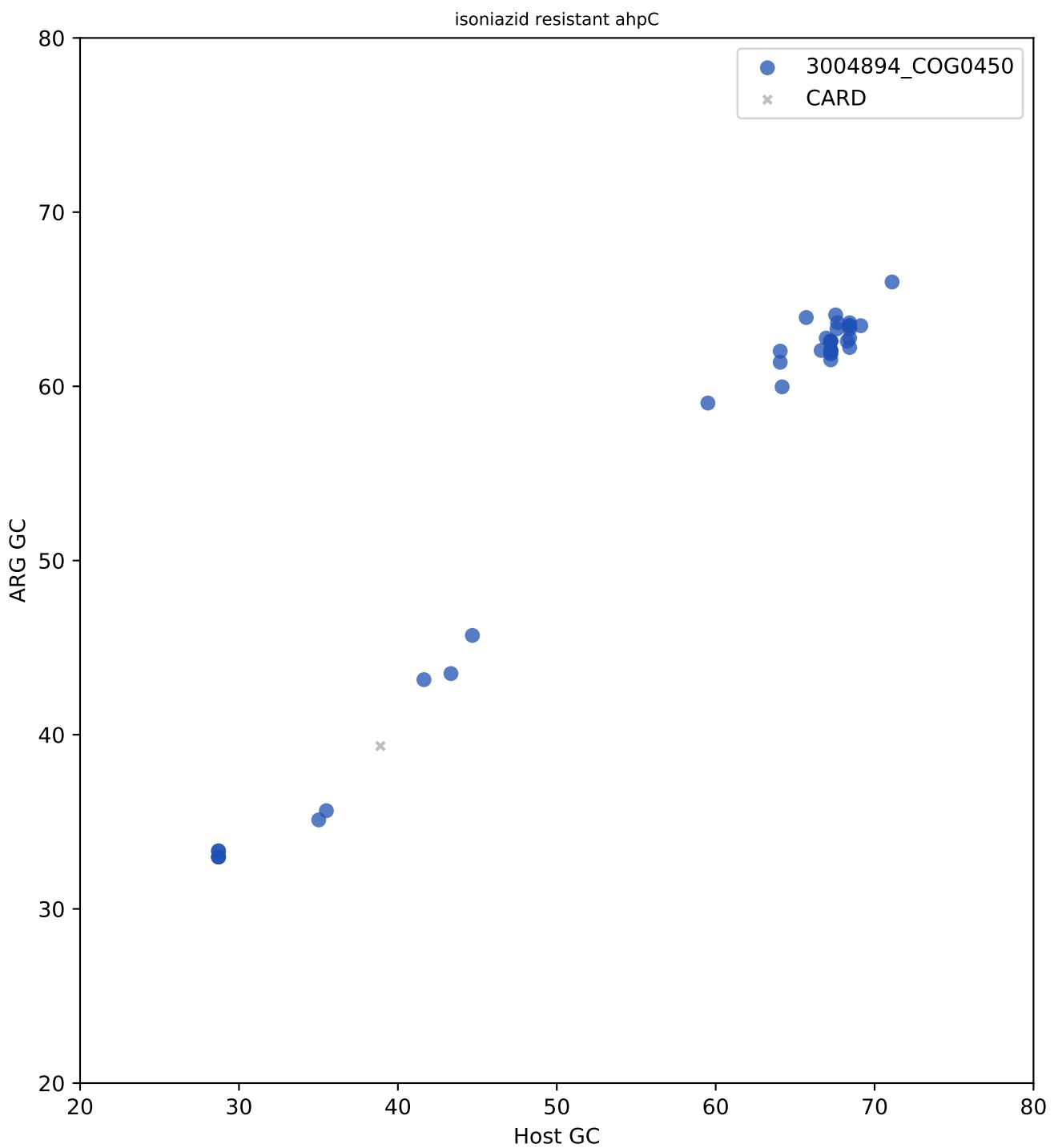
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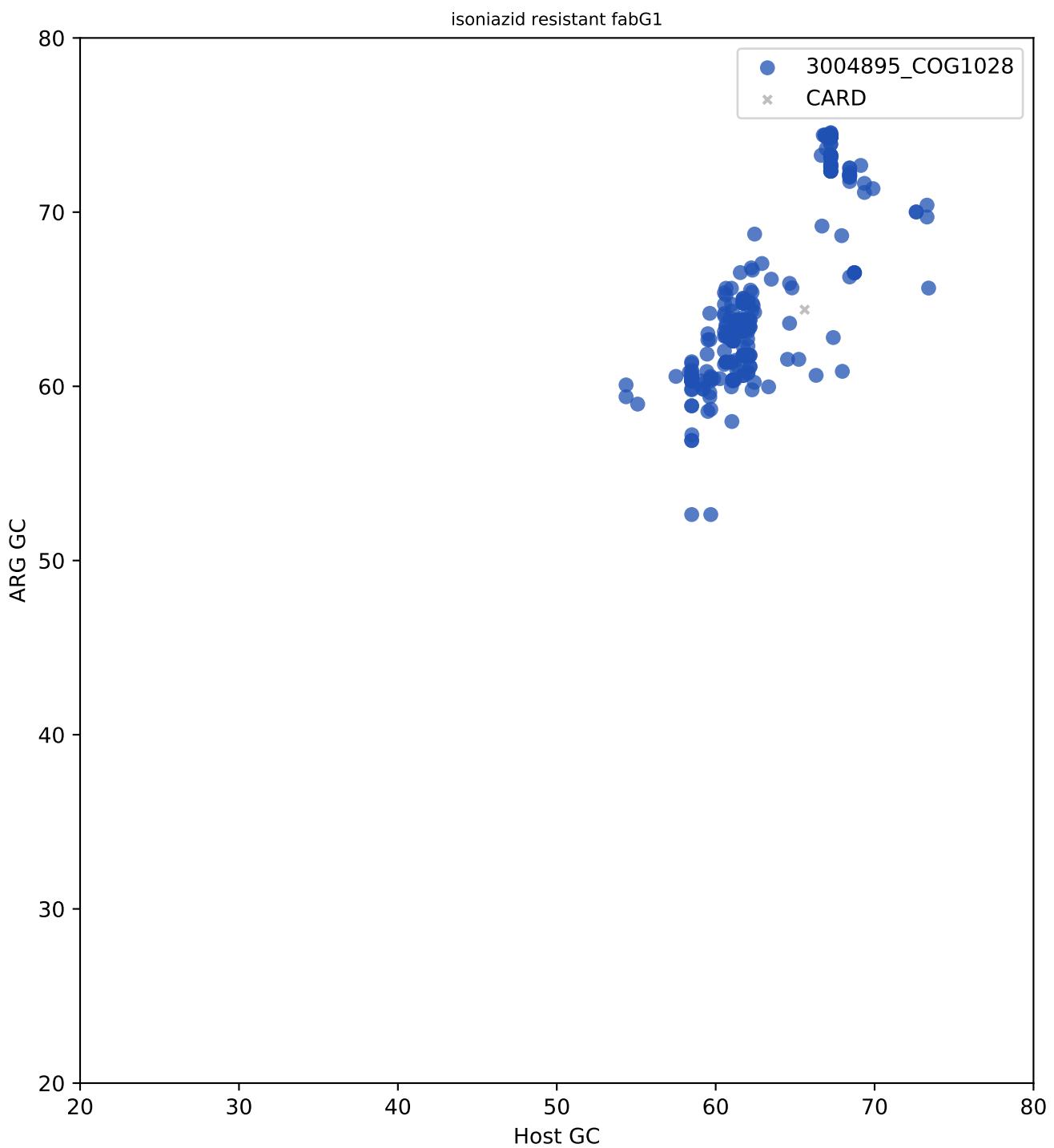
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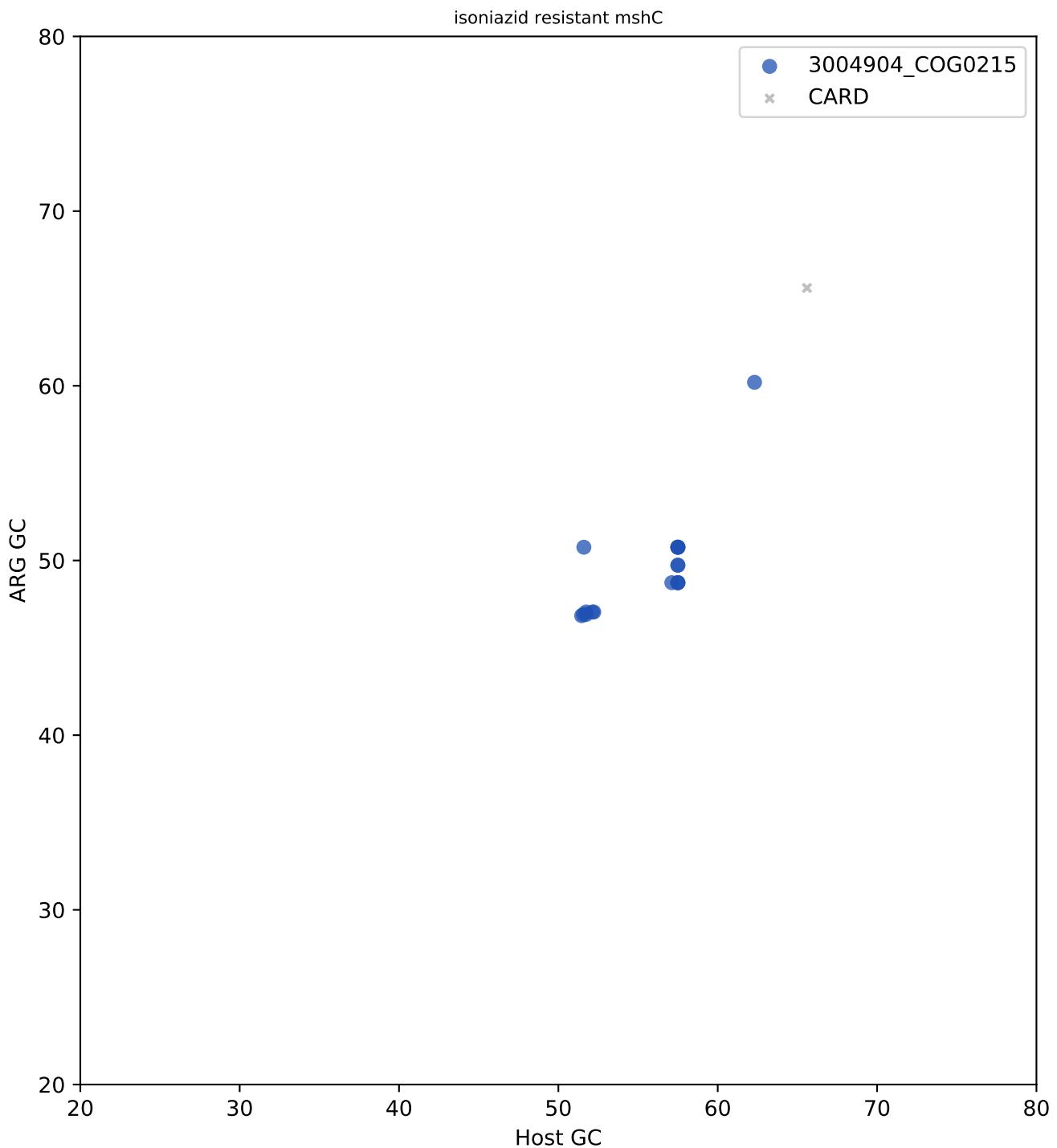
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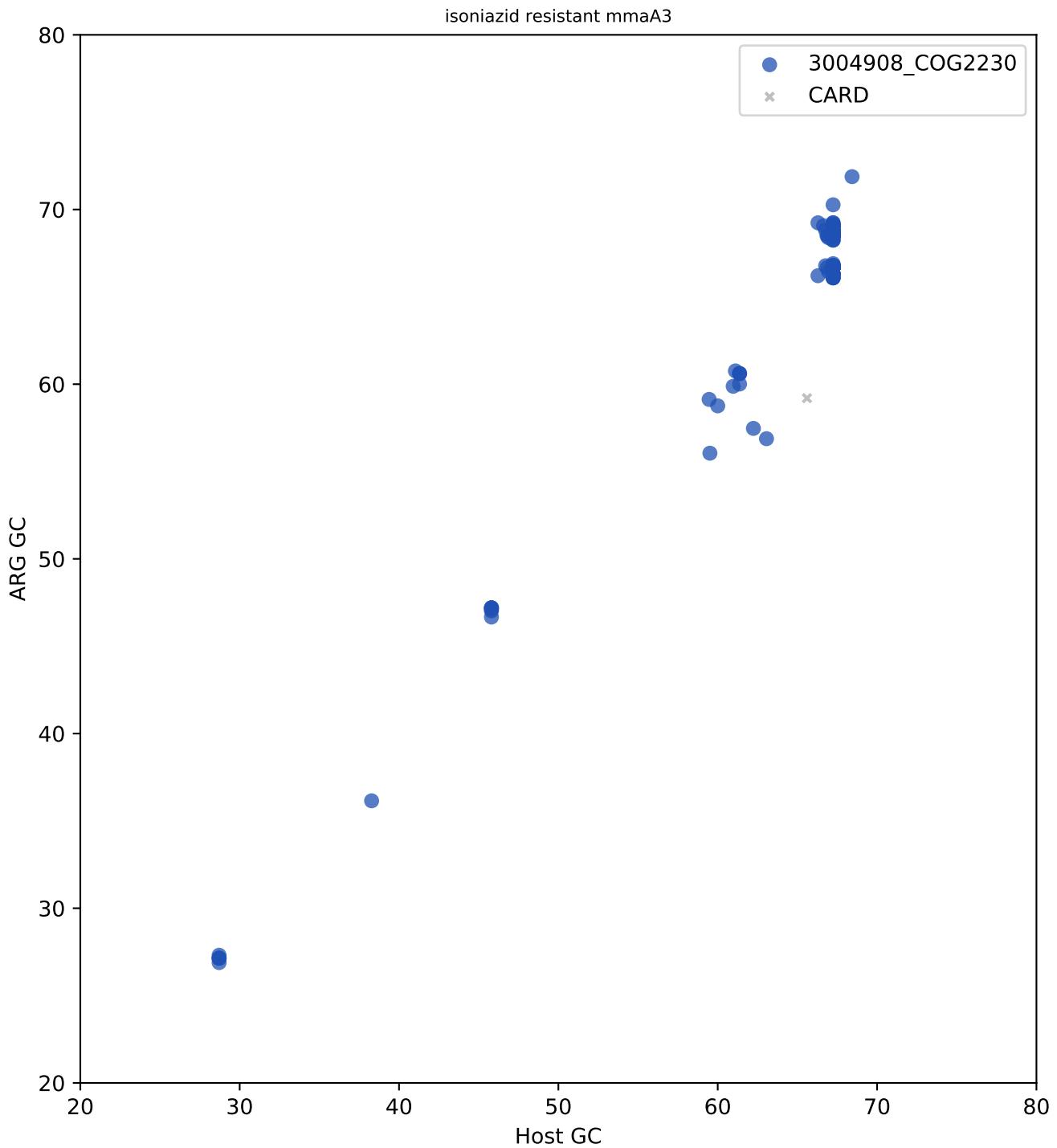
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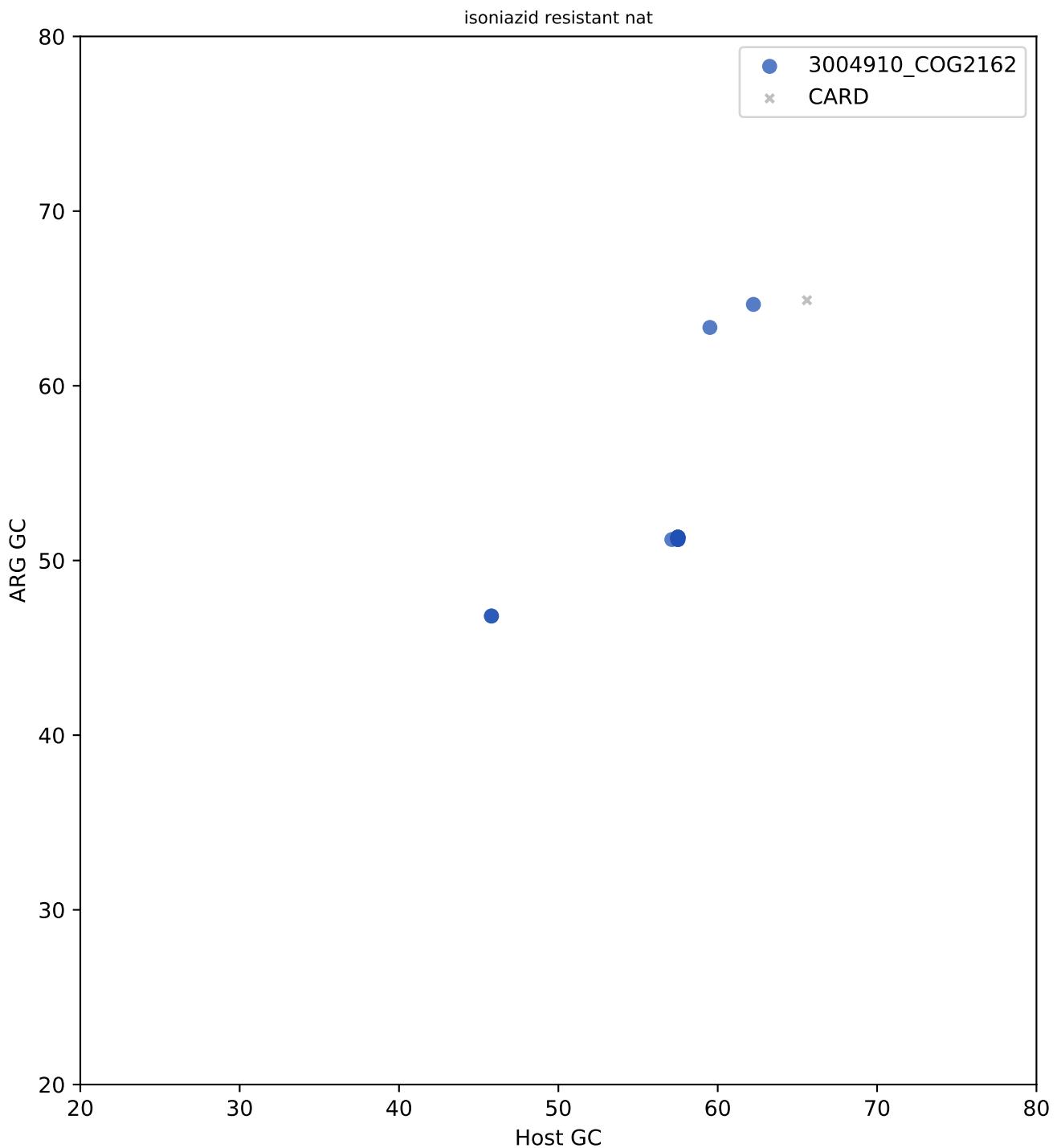
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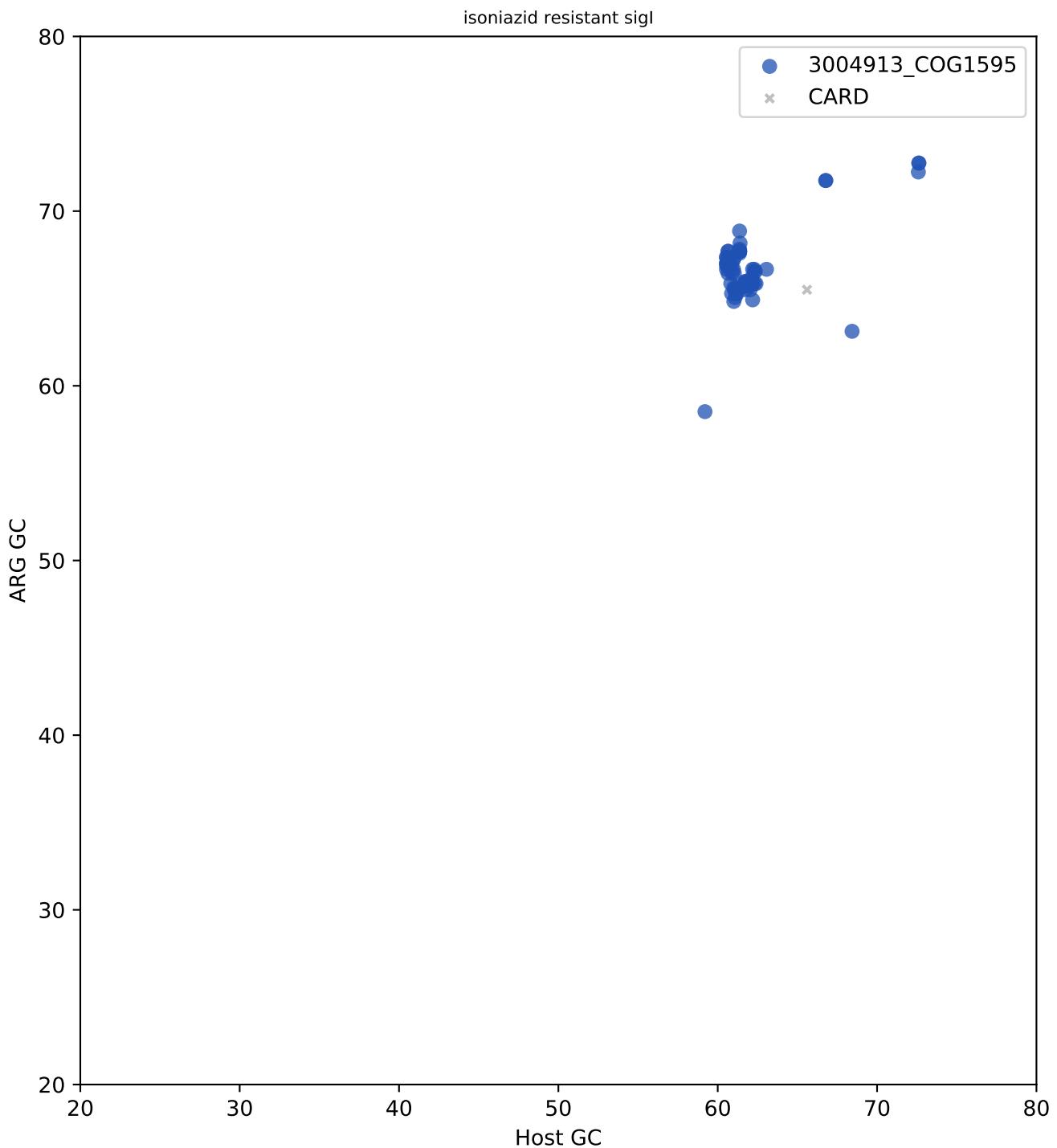
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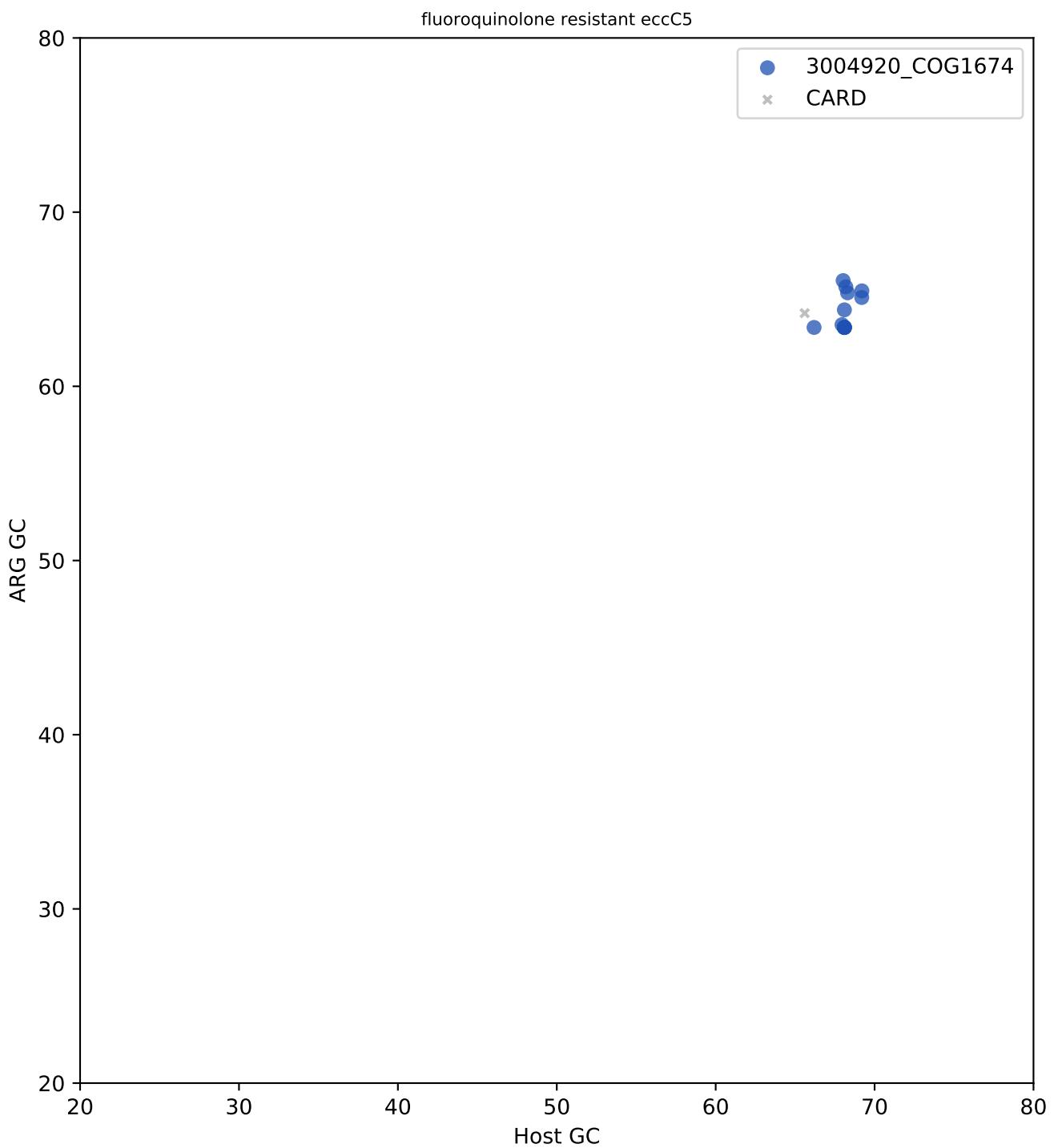
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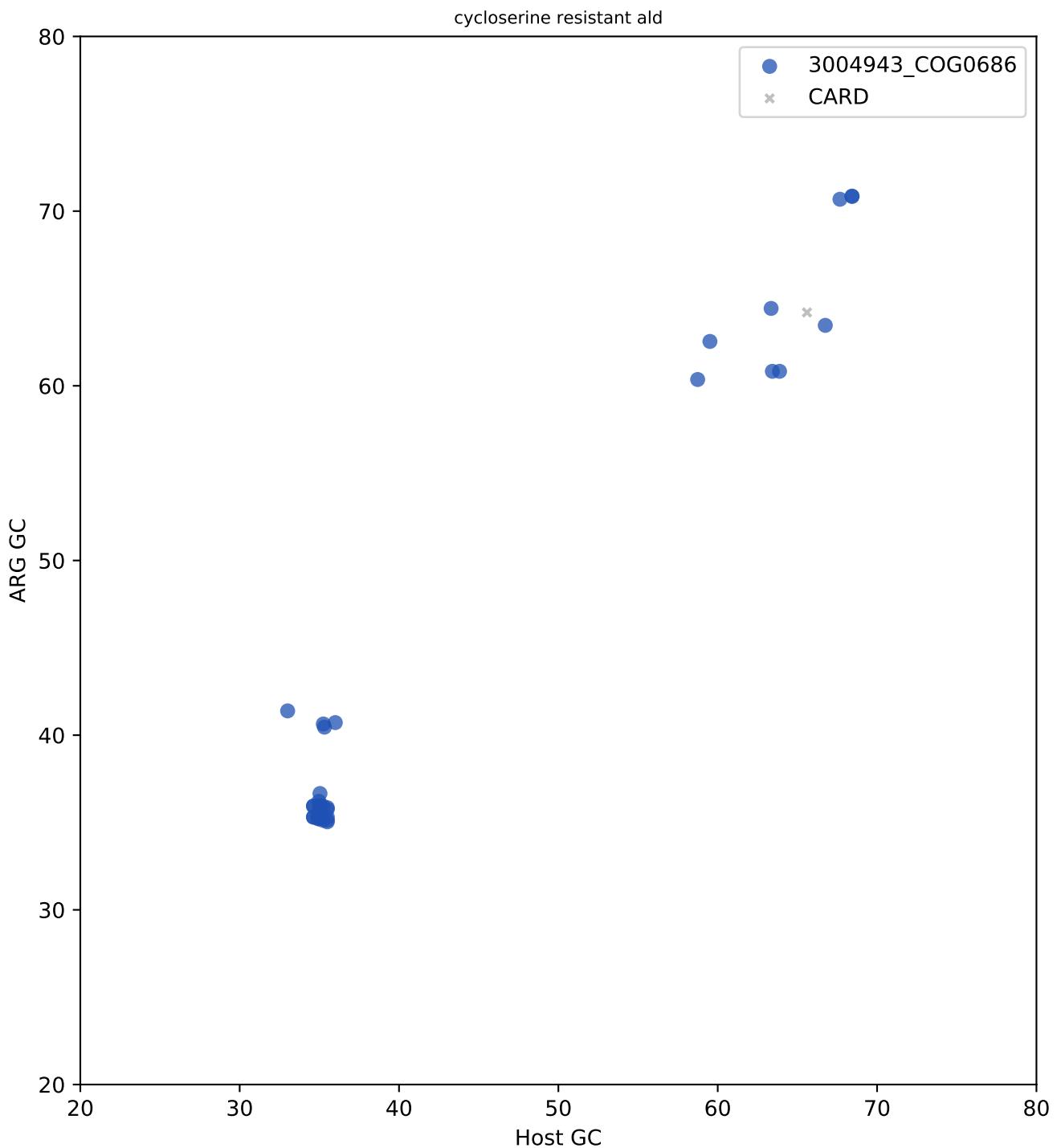
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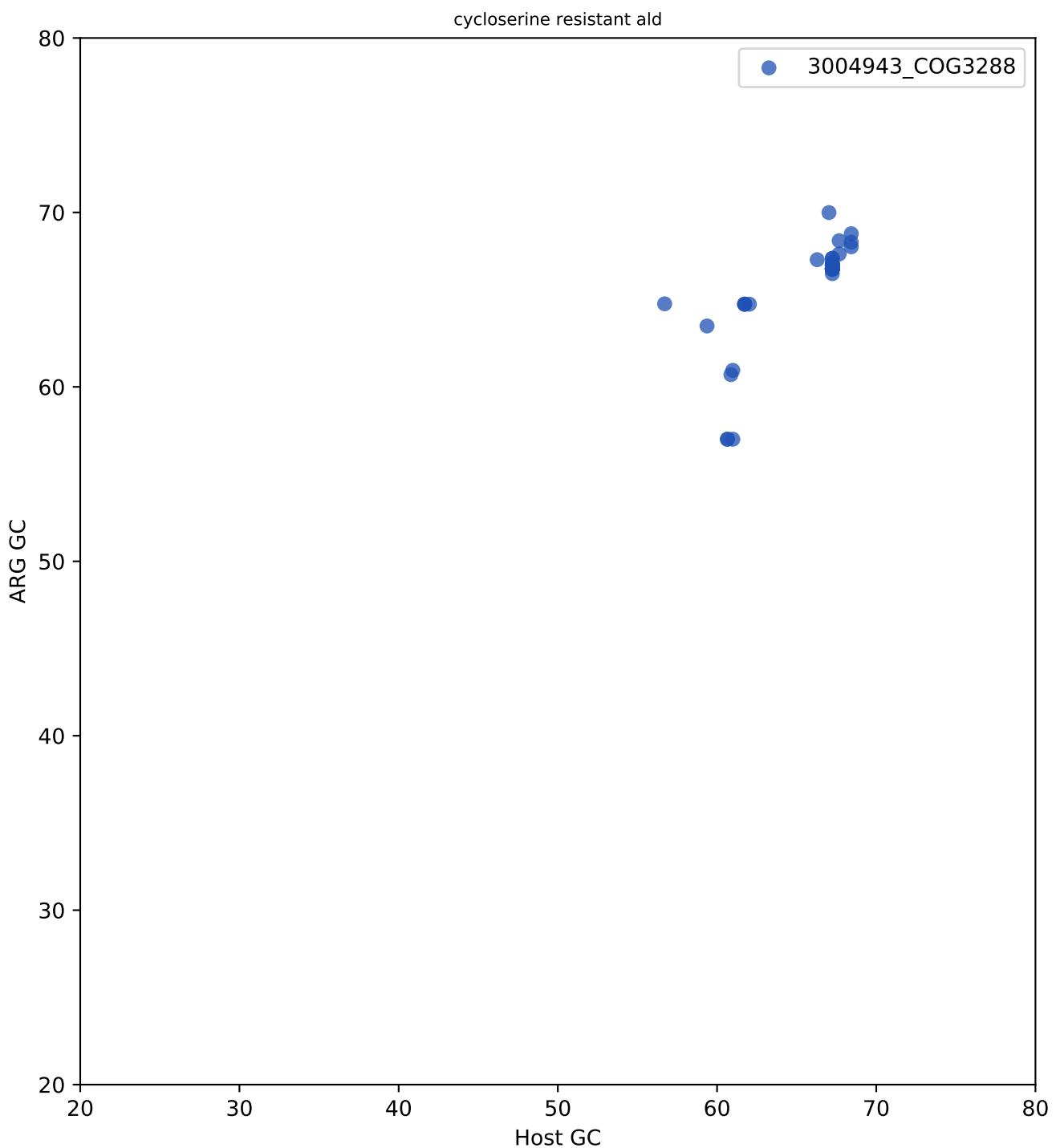
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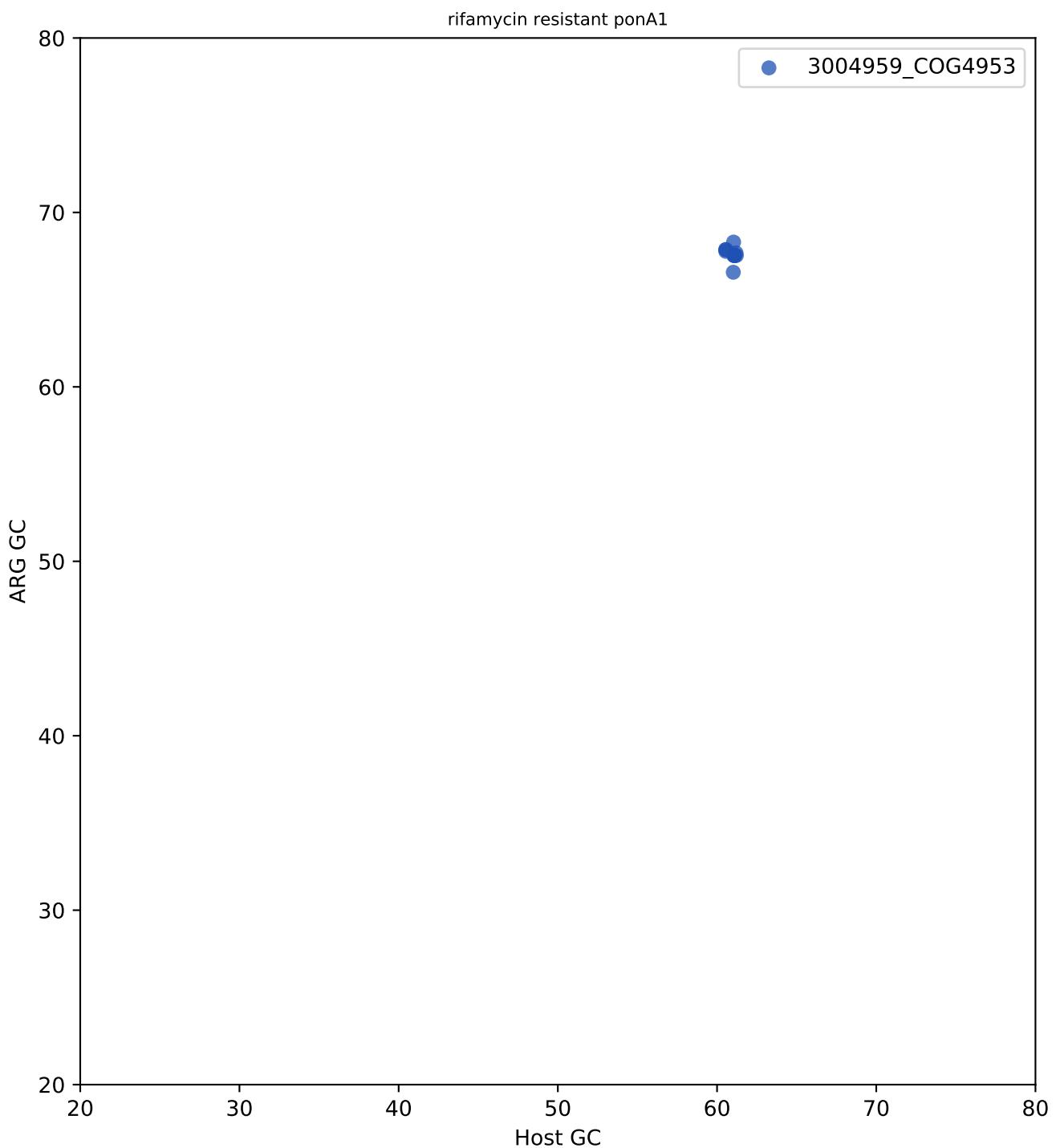
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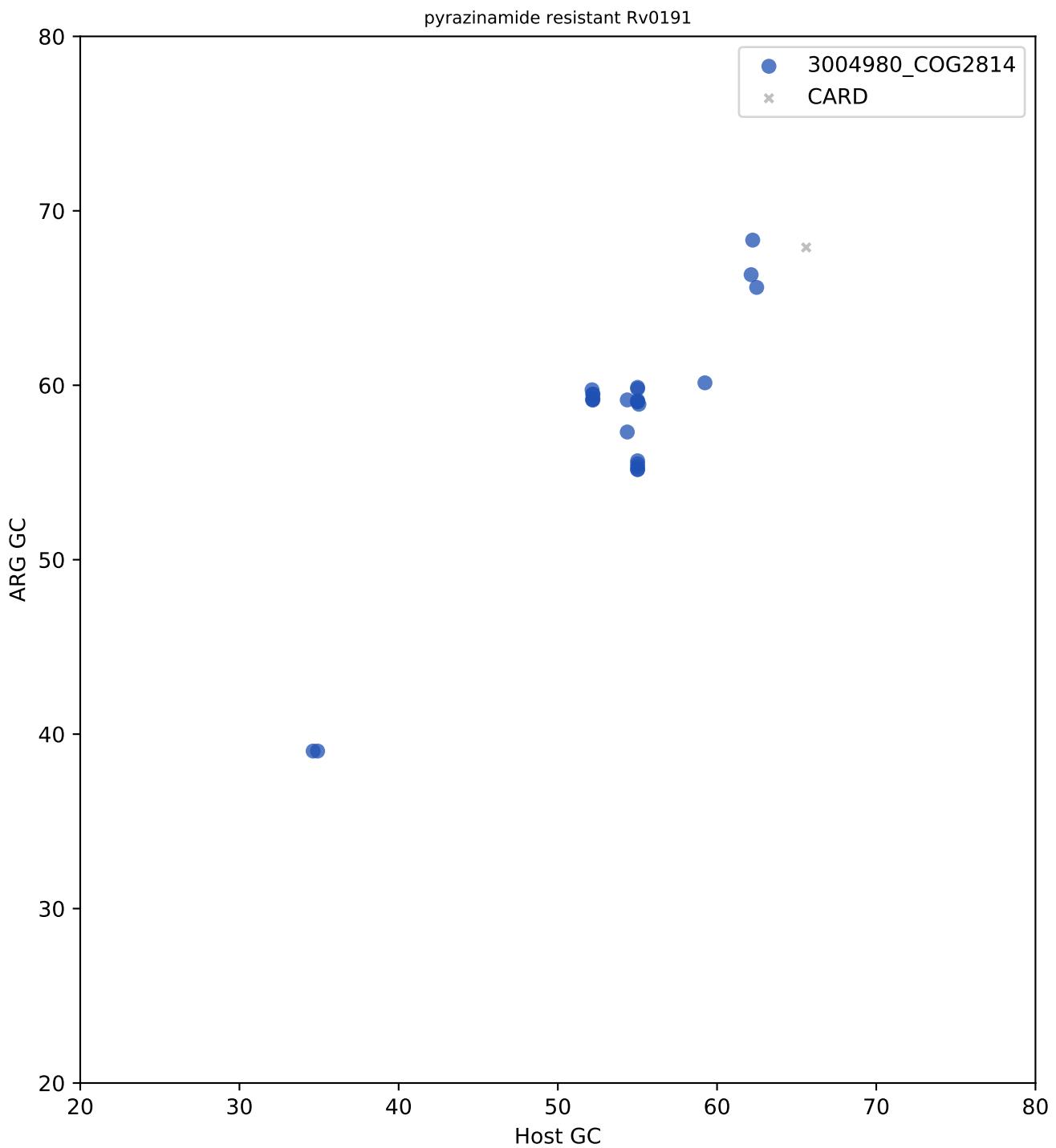
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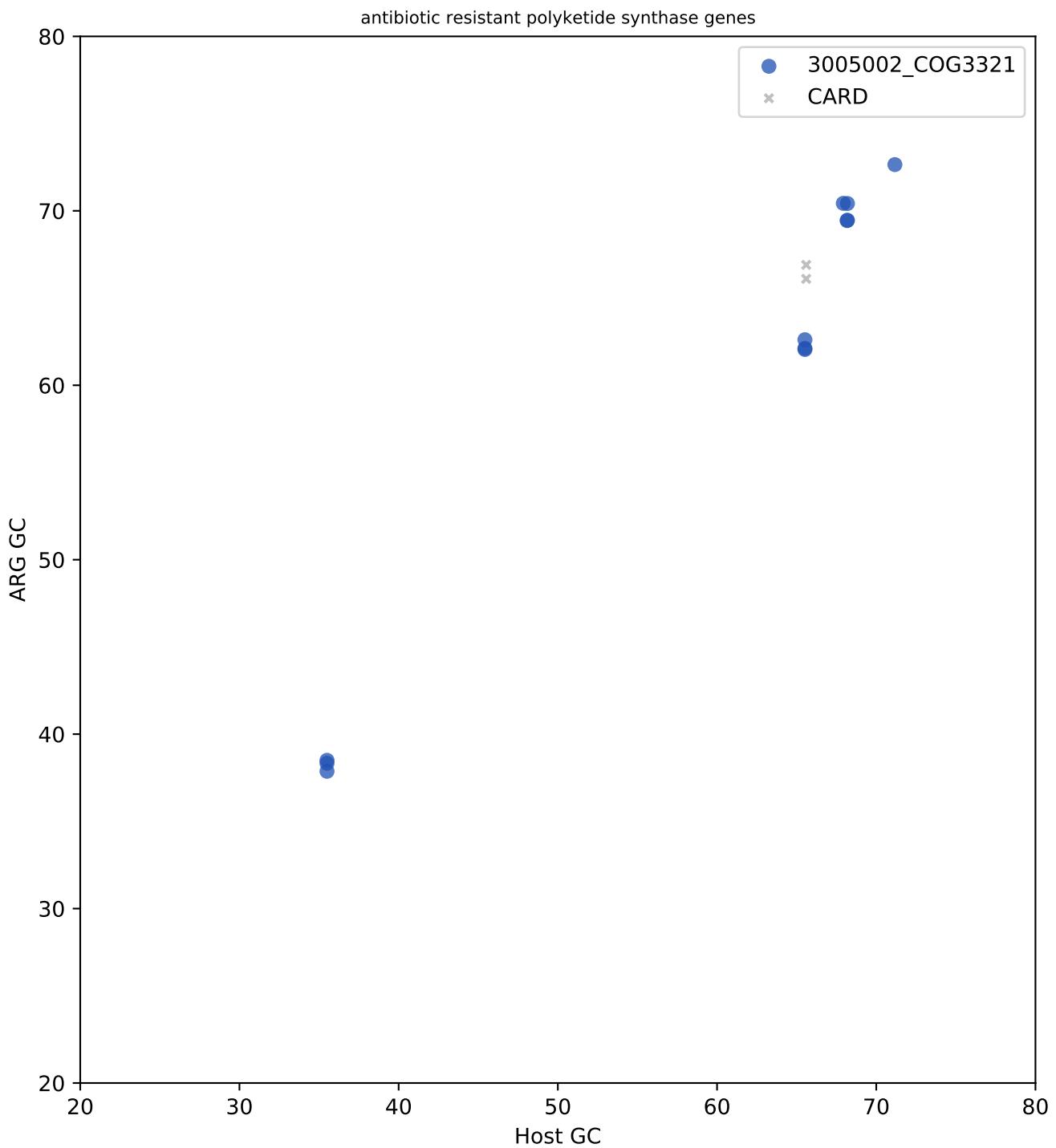
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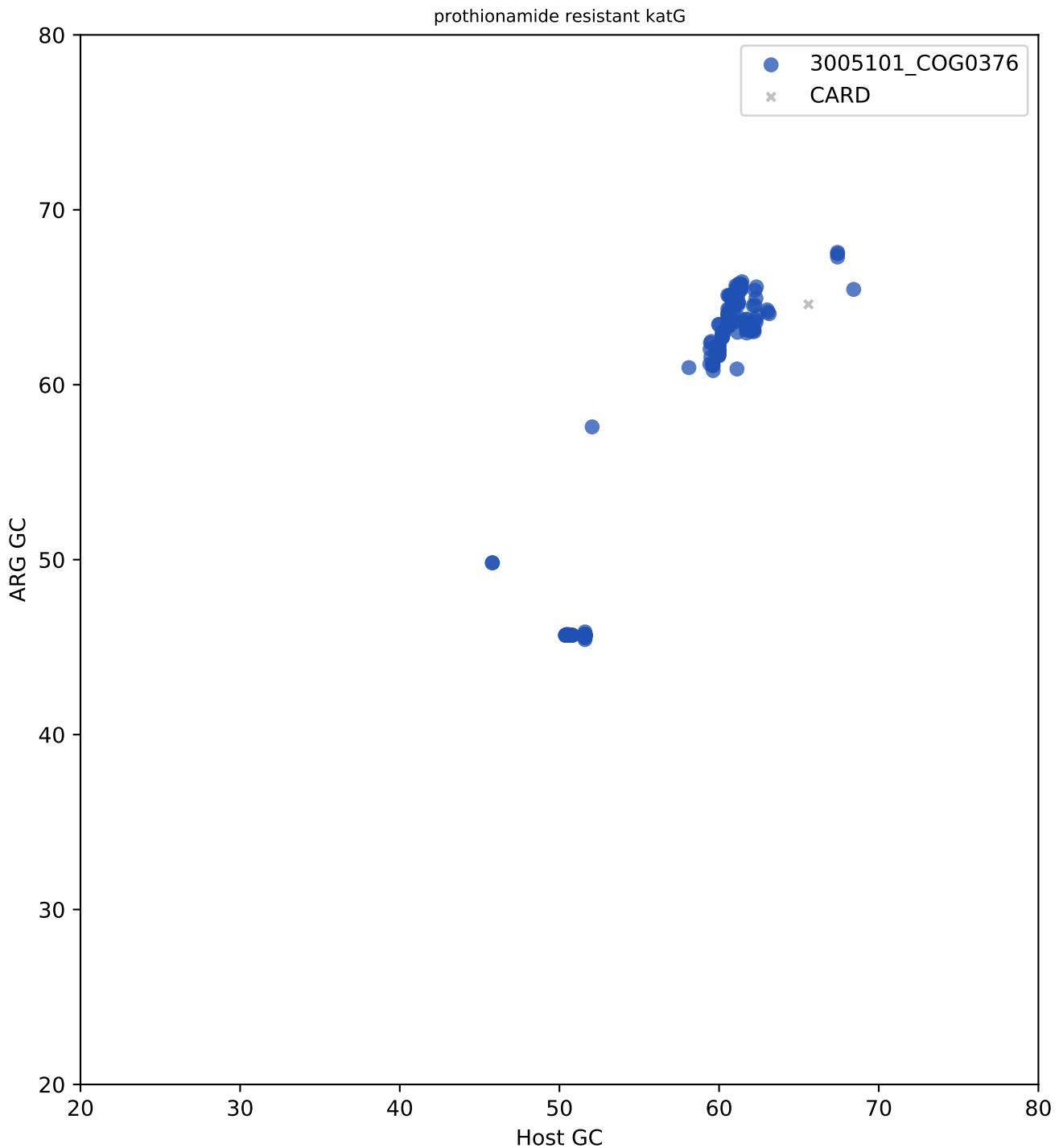
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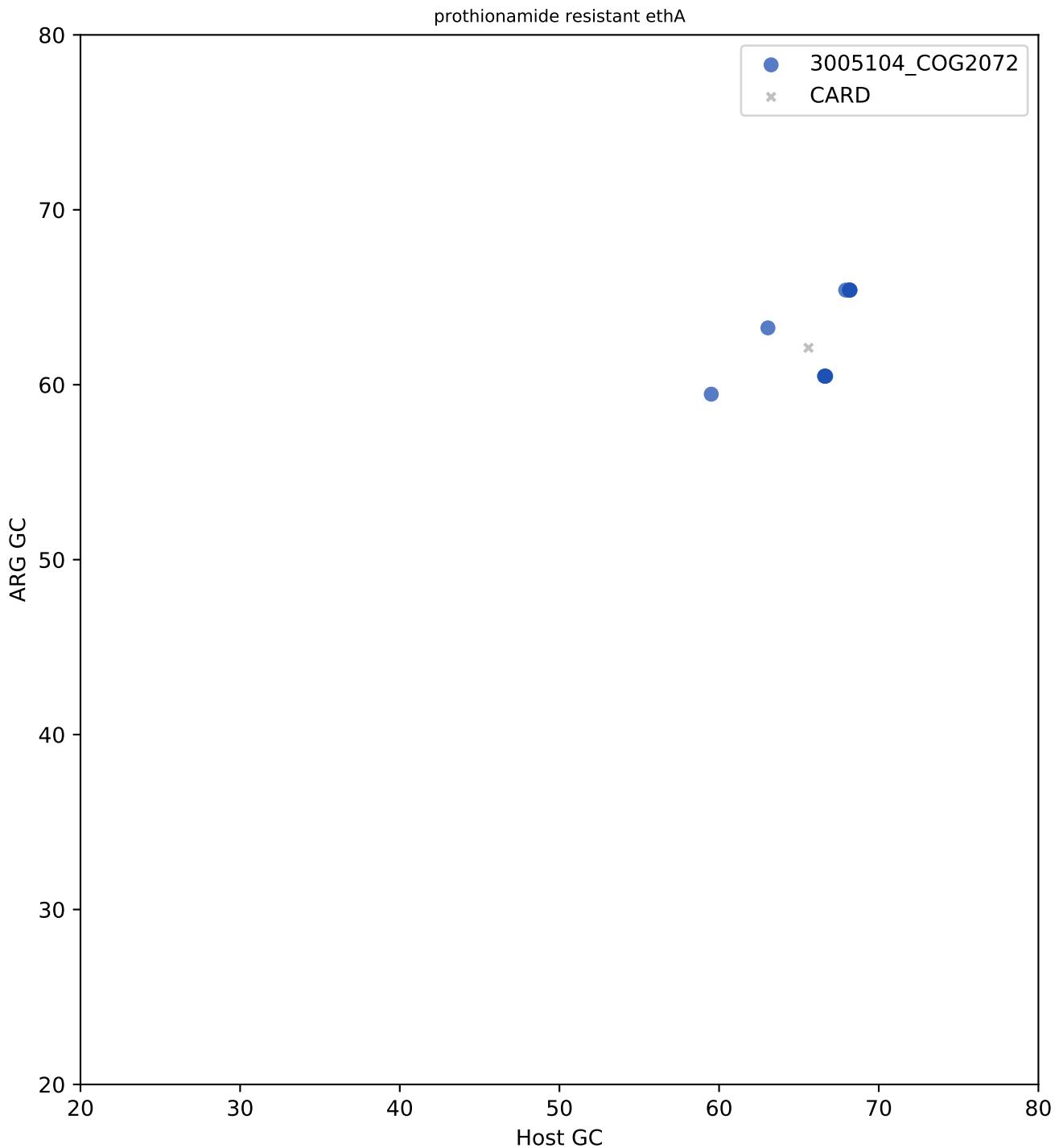
Supplementary Figure S1: (continued).



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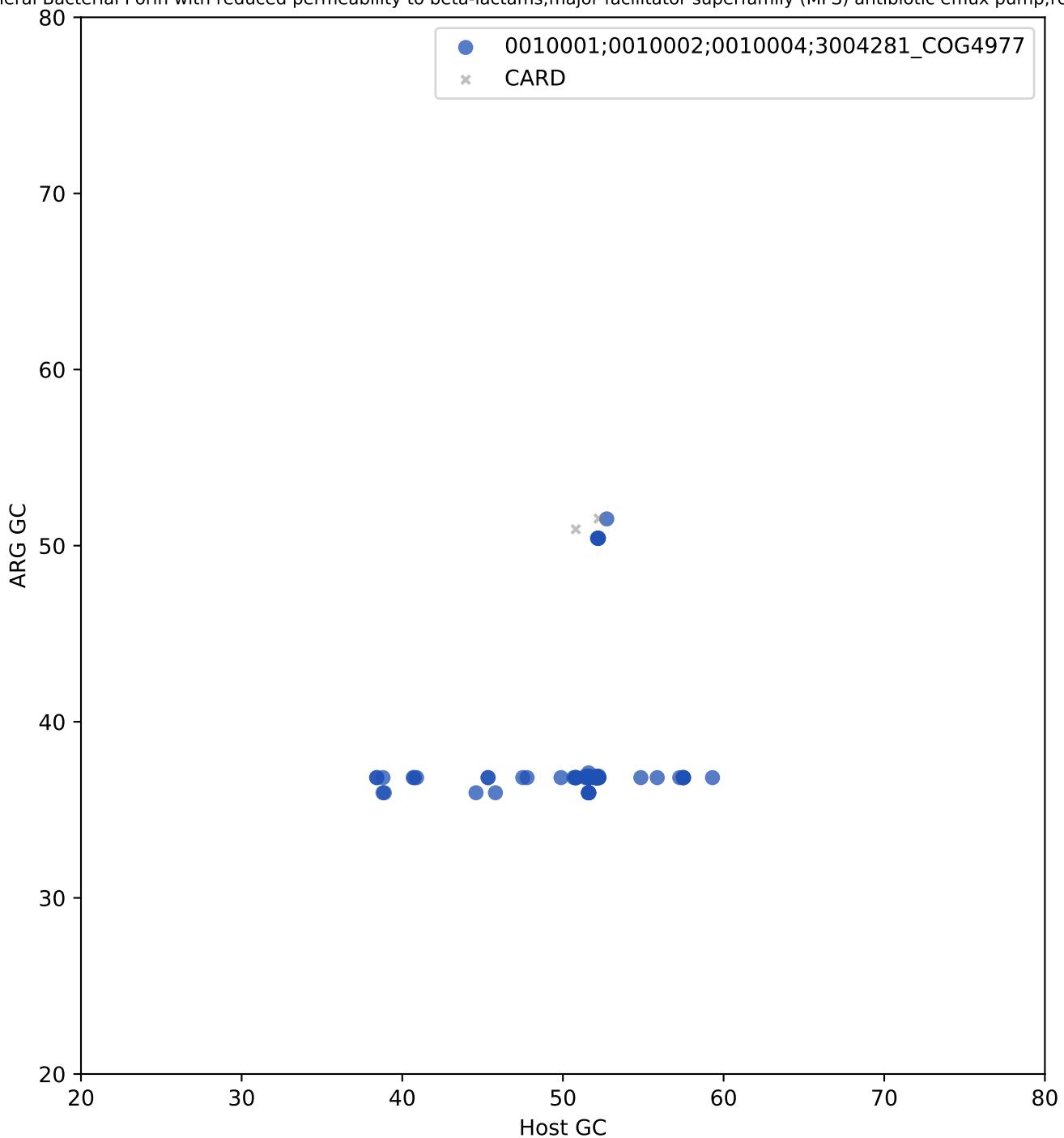


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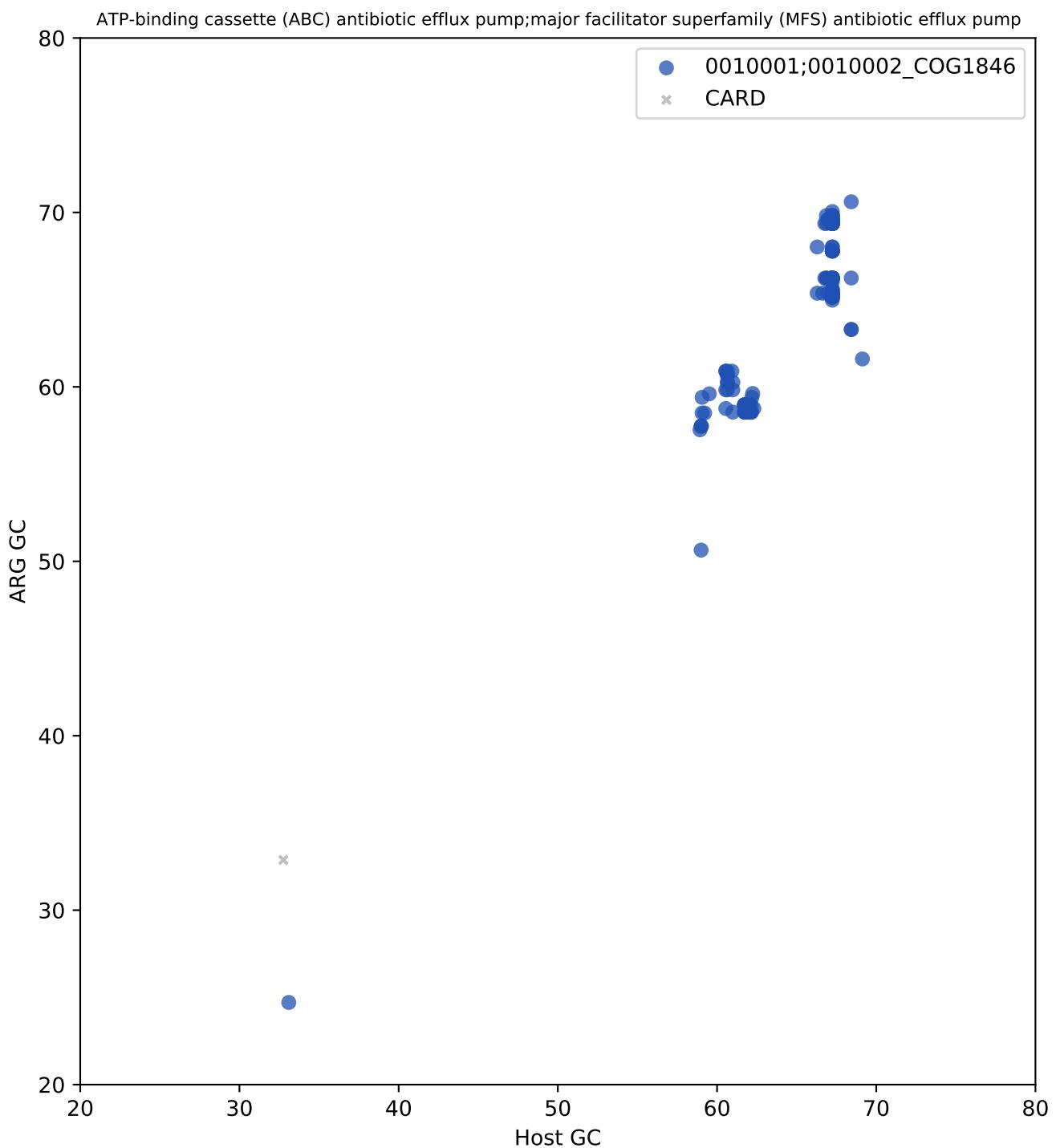


Supplementary Figure S1: (continued).

ump;General Bacterial Porin with reduced permeability to beta-lactams;major facilitator superfamily (MFS) antibiotic efflux pump;resistance-no

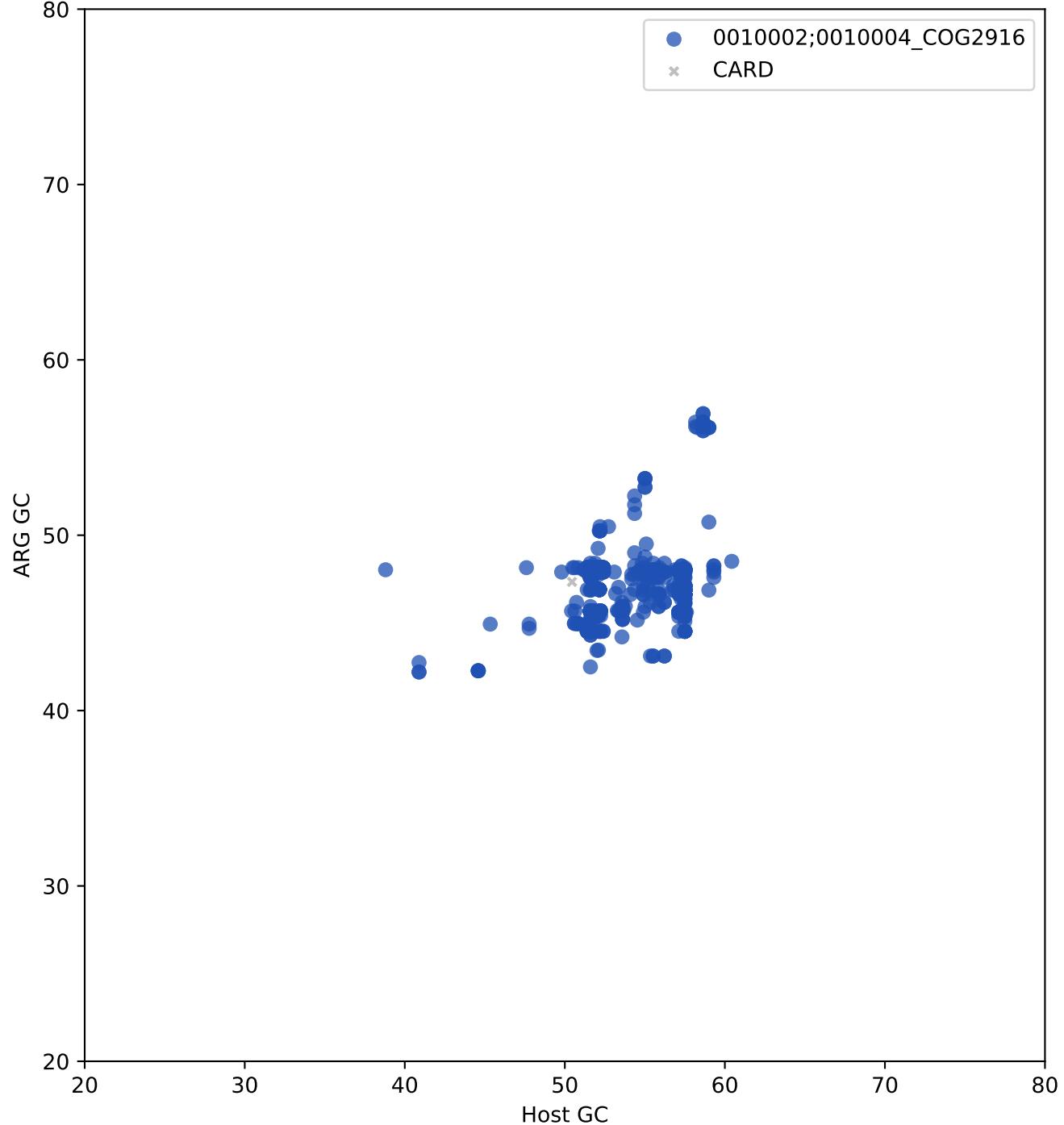


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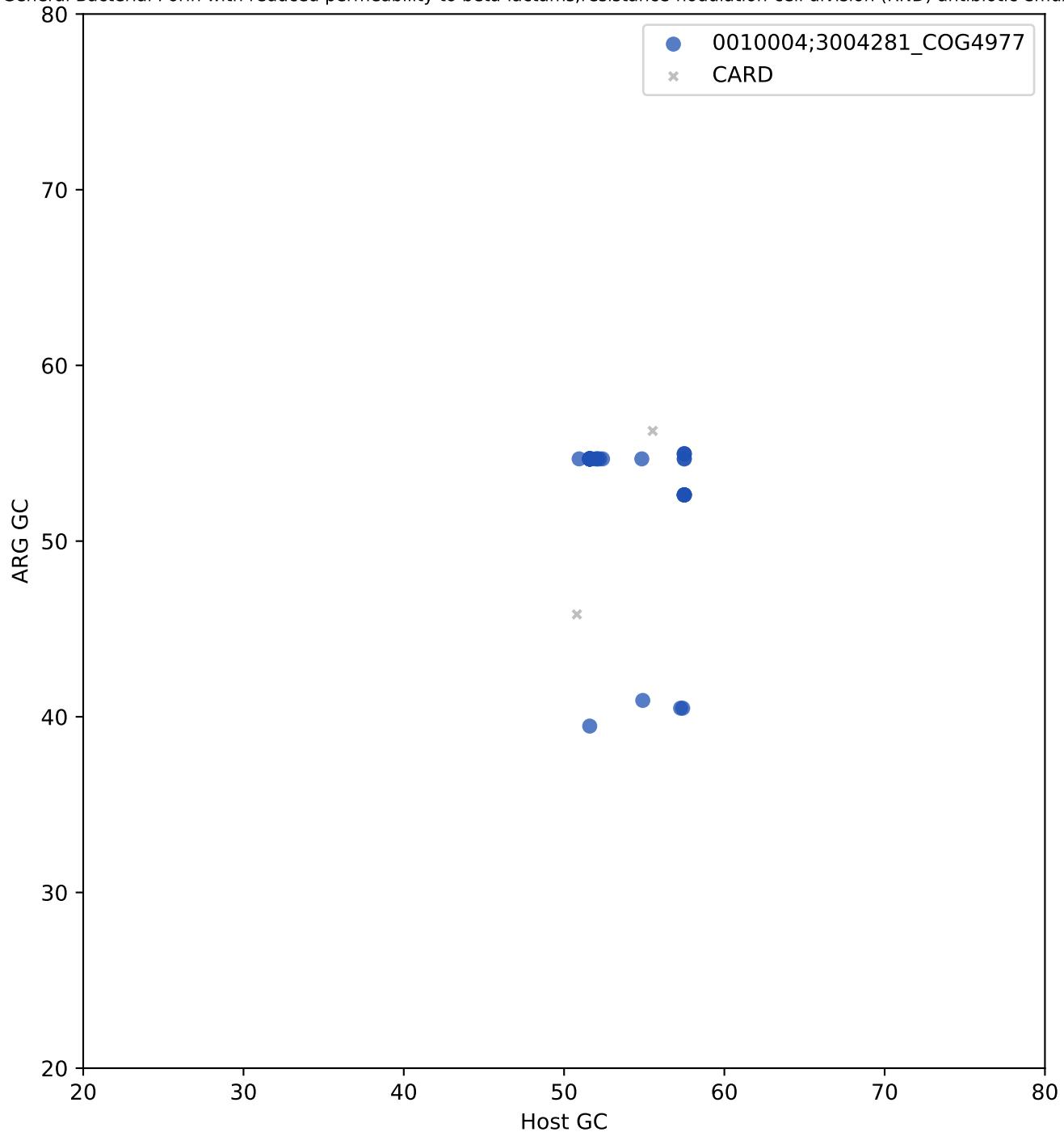
Supplementary Figure S1: (continued).

major facilitator superfamily (MFS) antibiotic efflux pump;resistance-nodulation-cell division (RND) antibiotic efflux pump



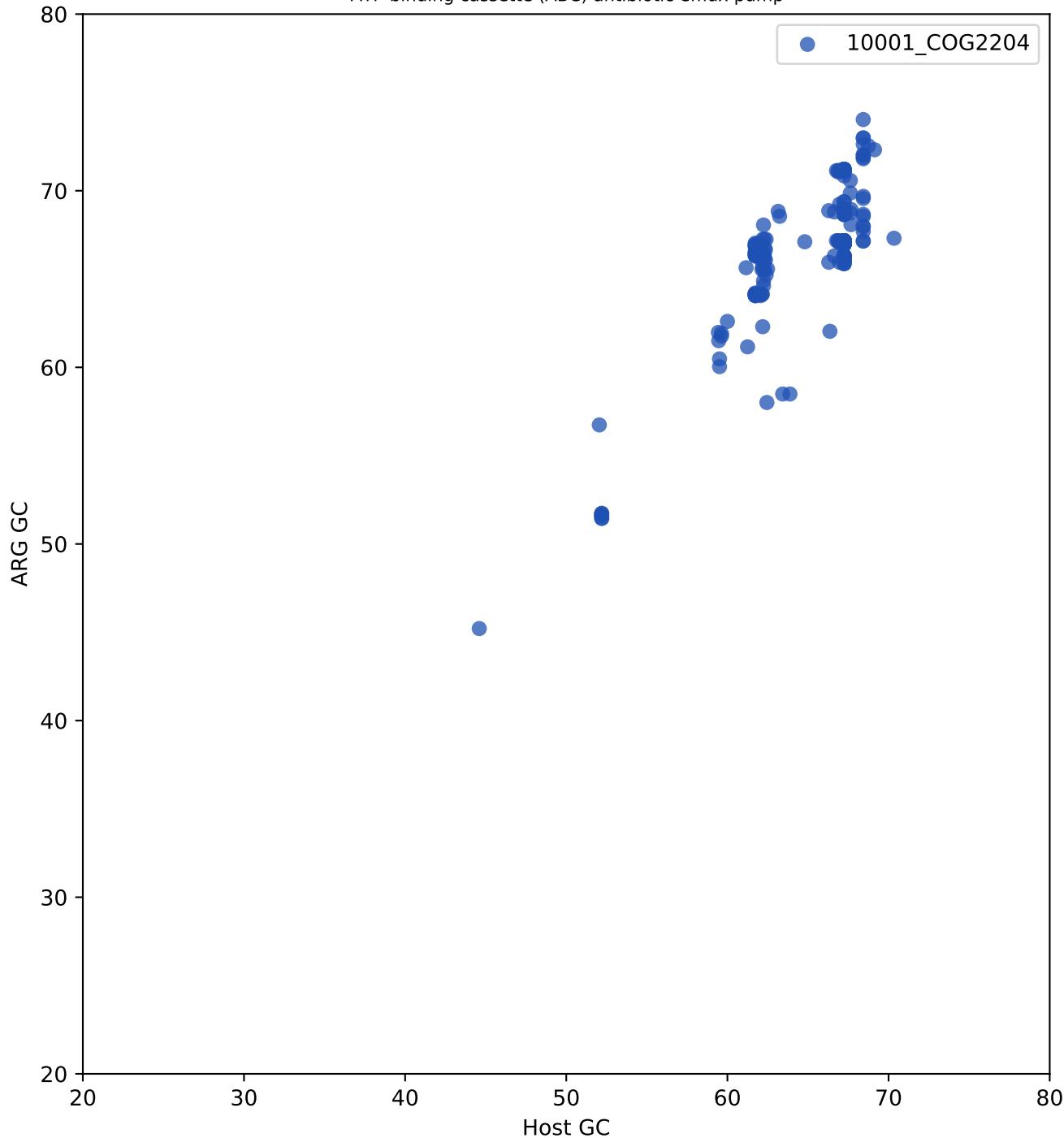
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General Bacterial Porin with reduced permeability to beta-lactams;resistance-nodulation-cell division (RND) antibiotic efflux pump

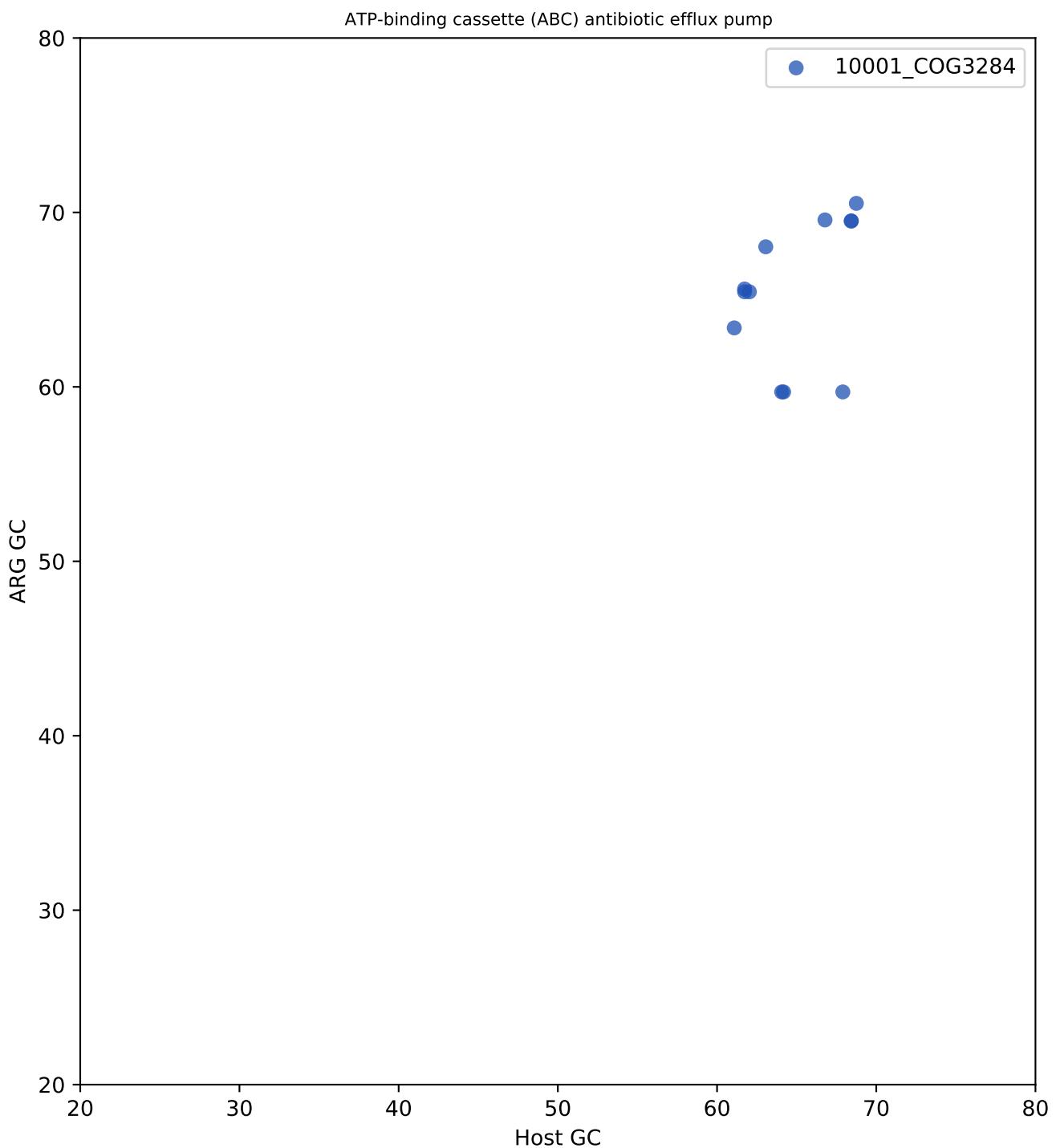


Supplementary Figure S1: (continued).

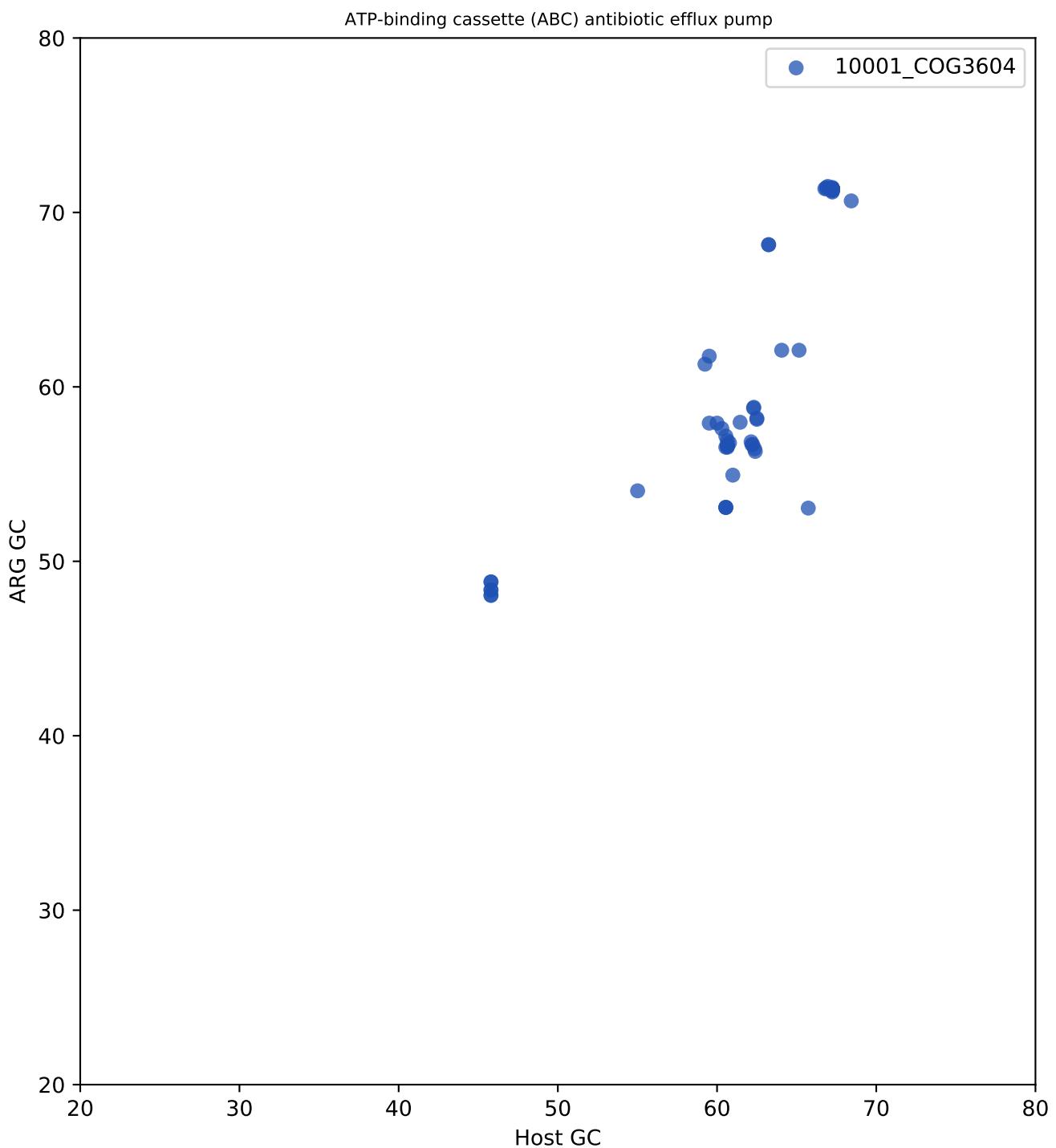
ATP-binding cassette (ABC) antibiotic efflux pump



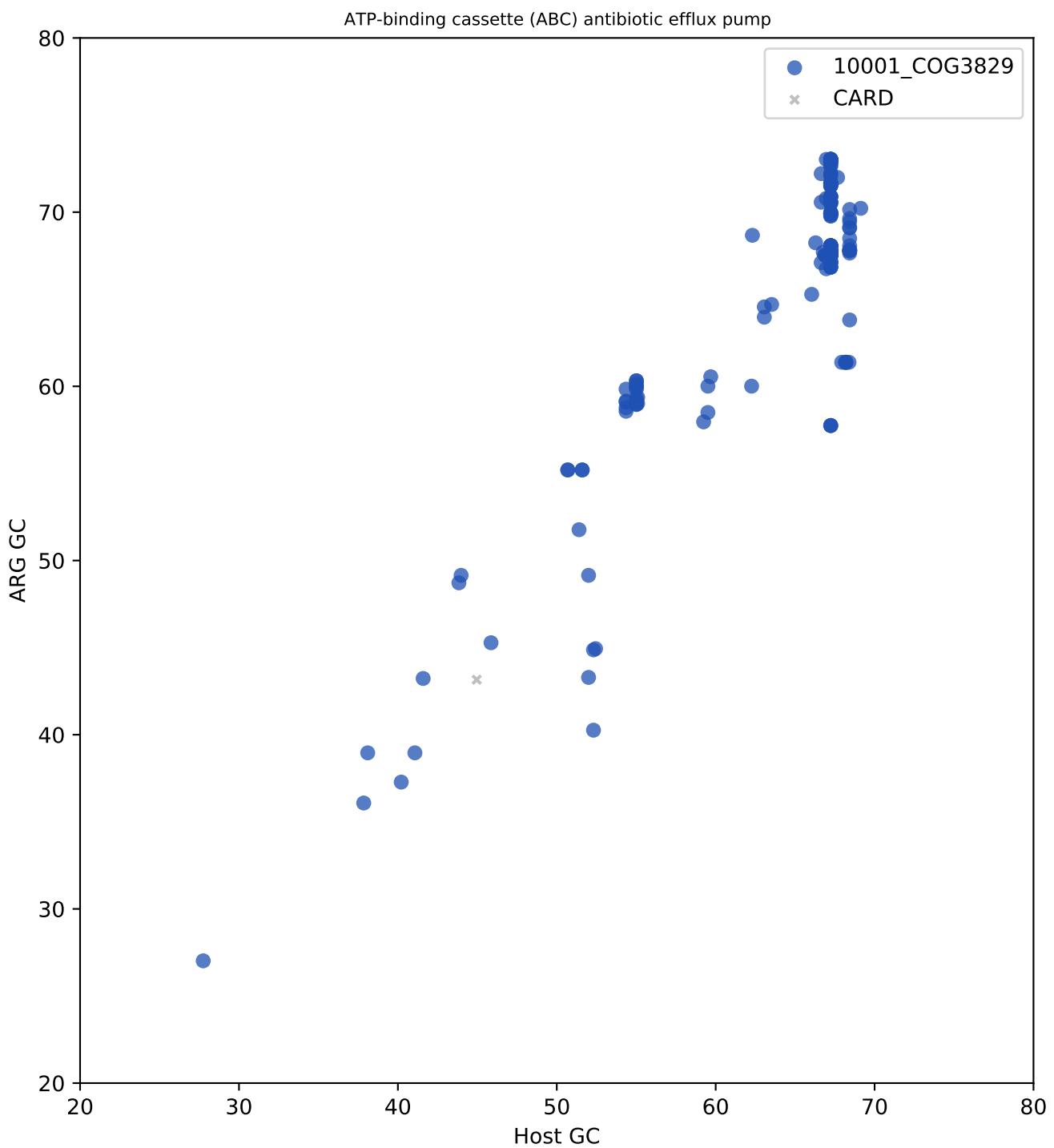
Supplementary Figure S1: (continued).



Supplementary Figure S1: (continued).

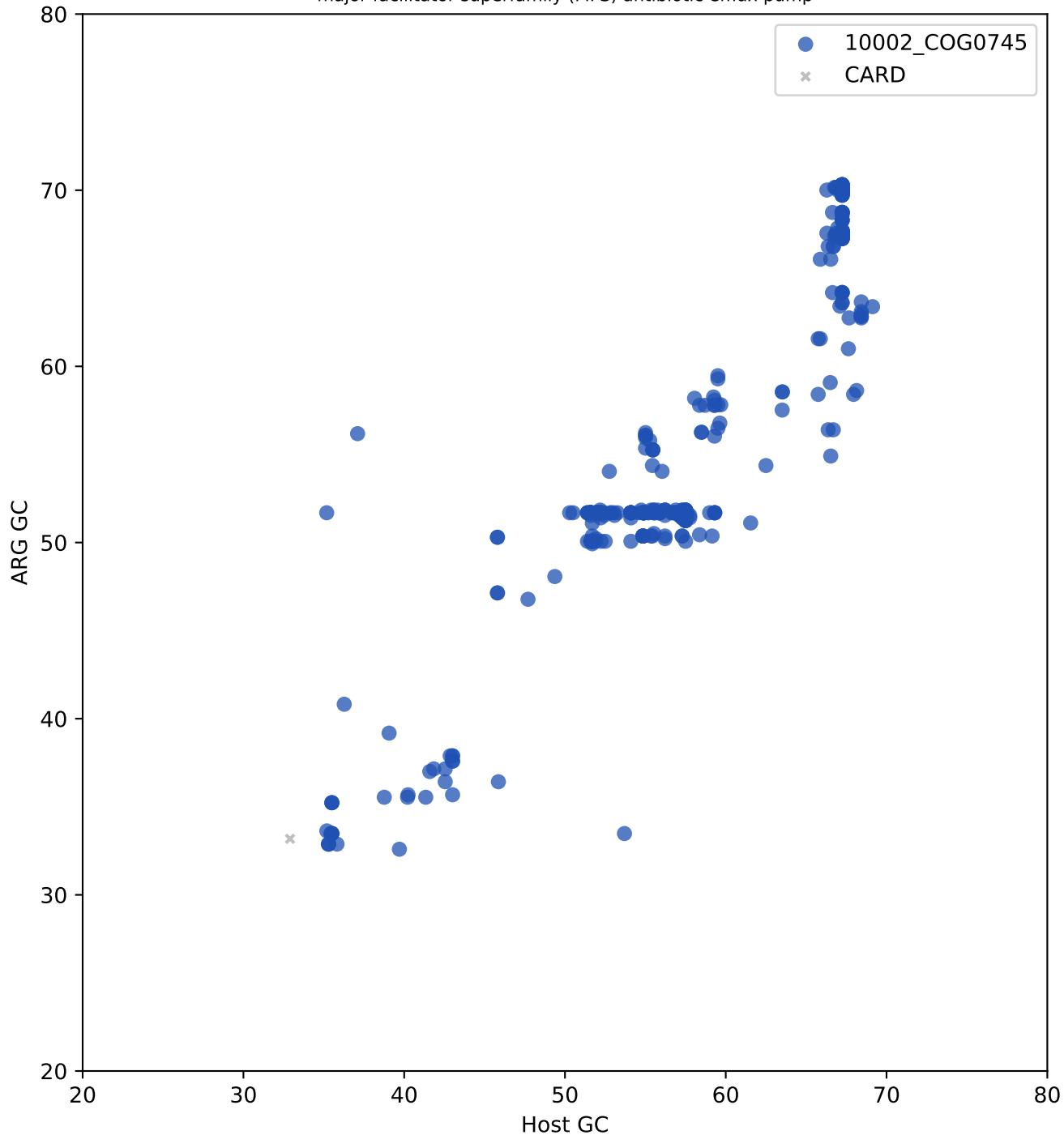


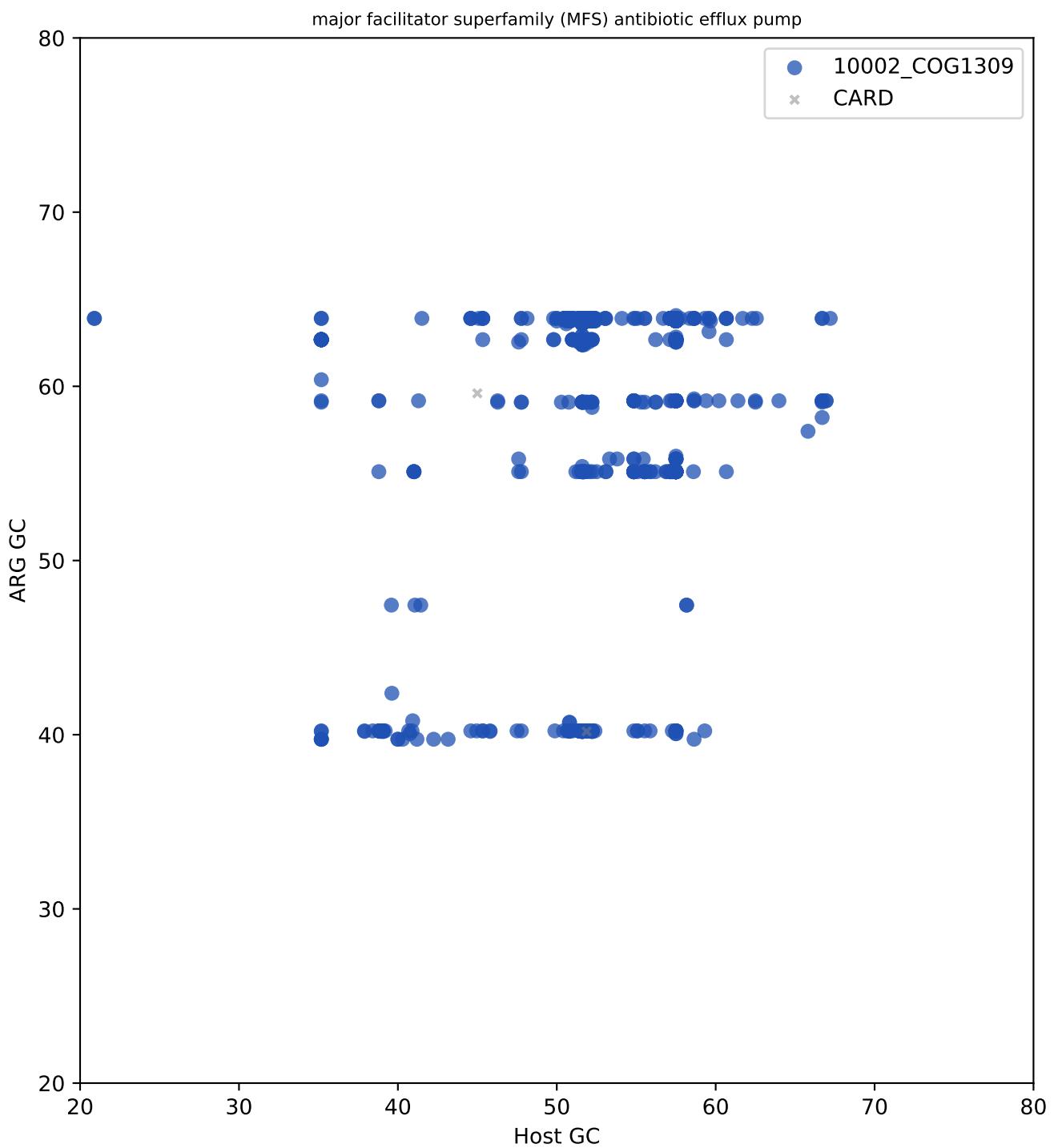
Supplementary Figure S1: (continued).



Supplementary Figure S1: (continued).

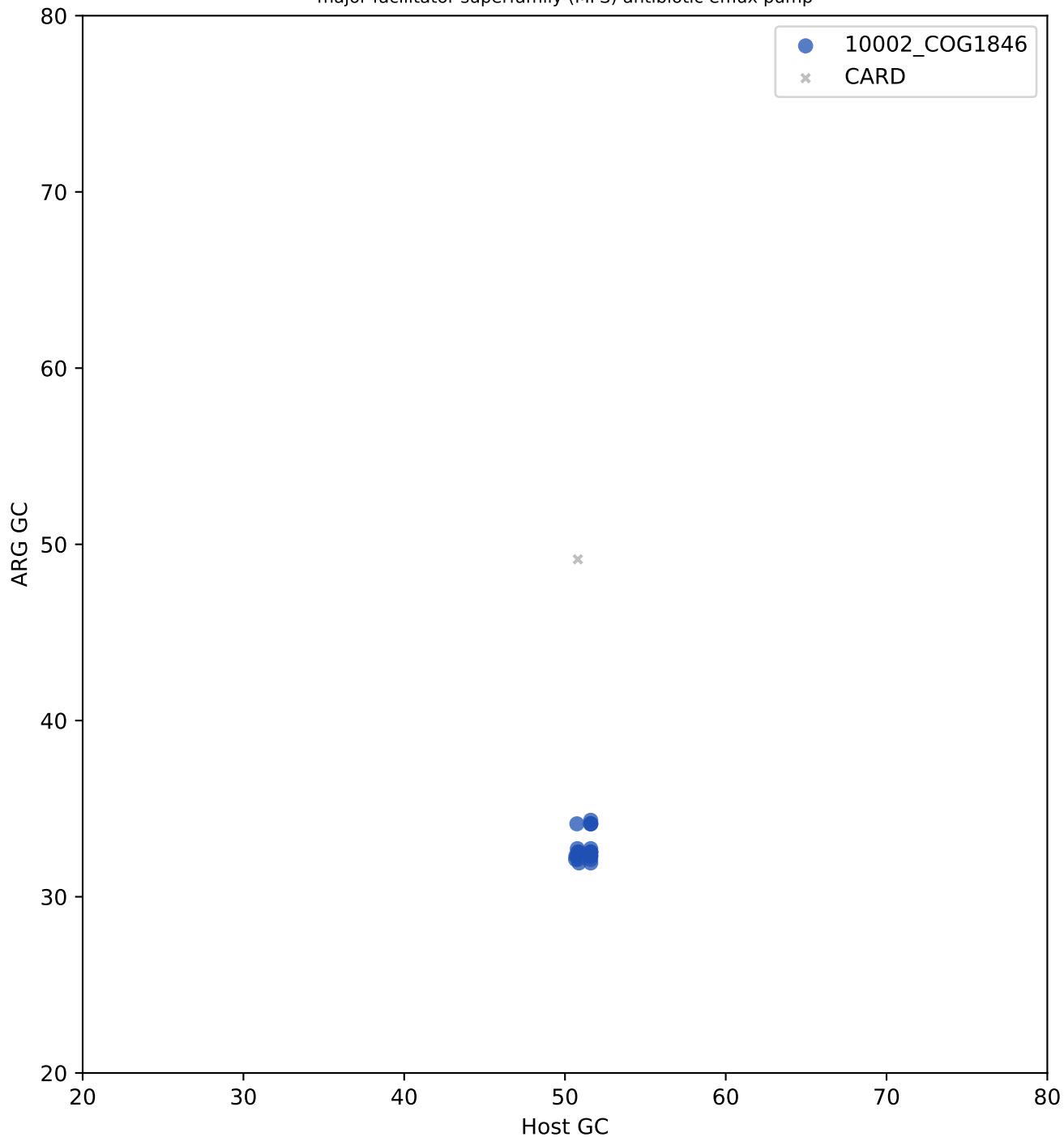
major facilitator superfamily (MFS) antibiotic efflux pump





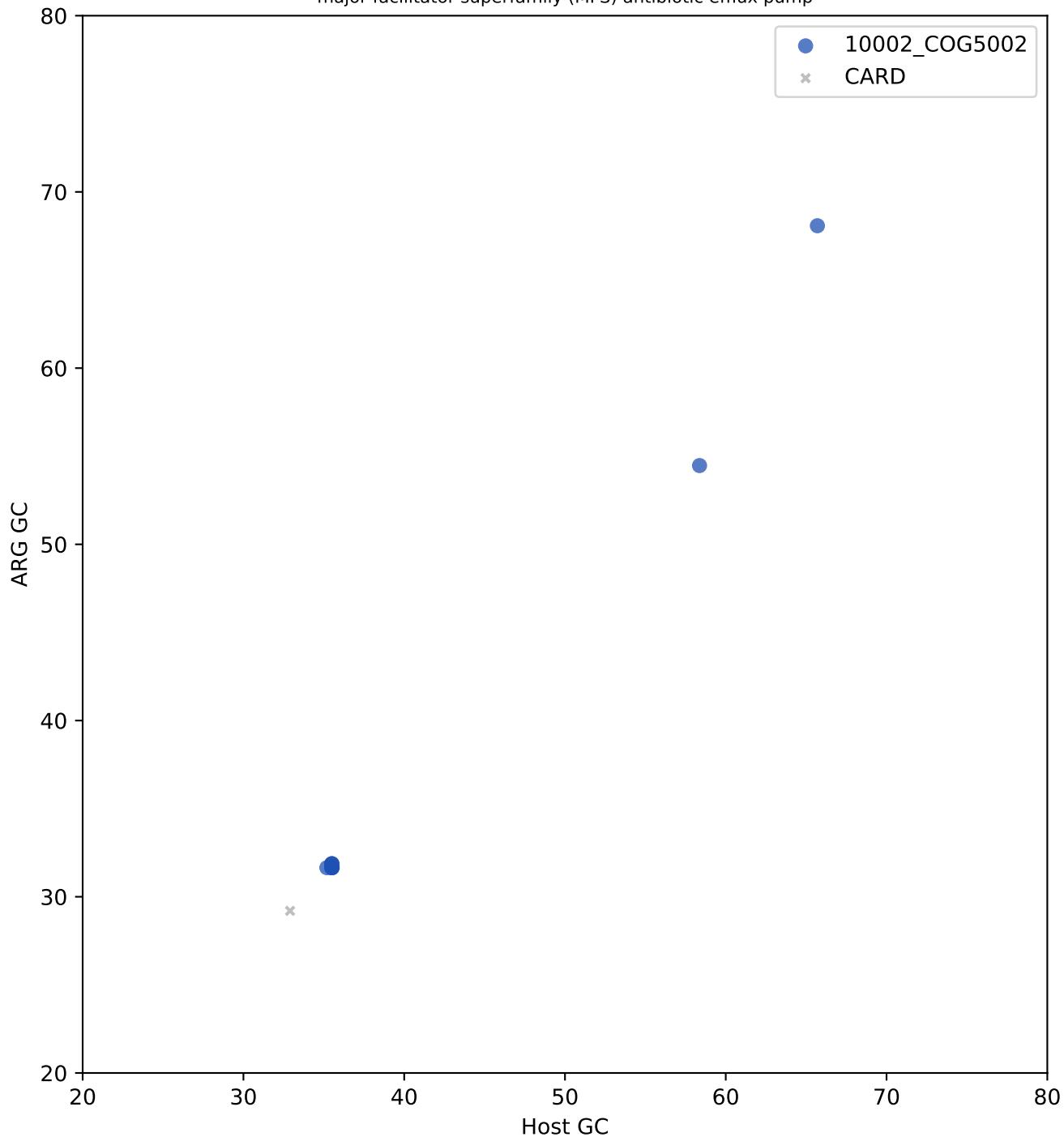
Supplementary Figure S1: (continued).

major facilitator superfamily (MFS) antibiotic efflux pump

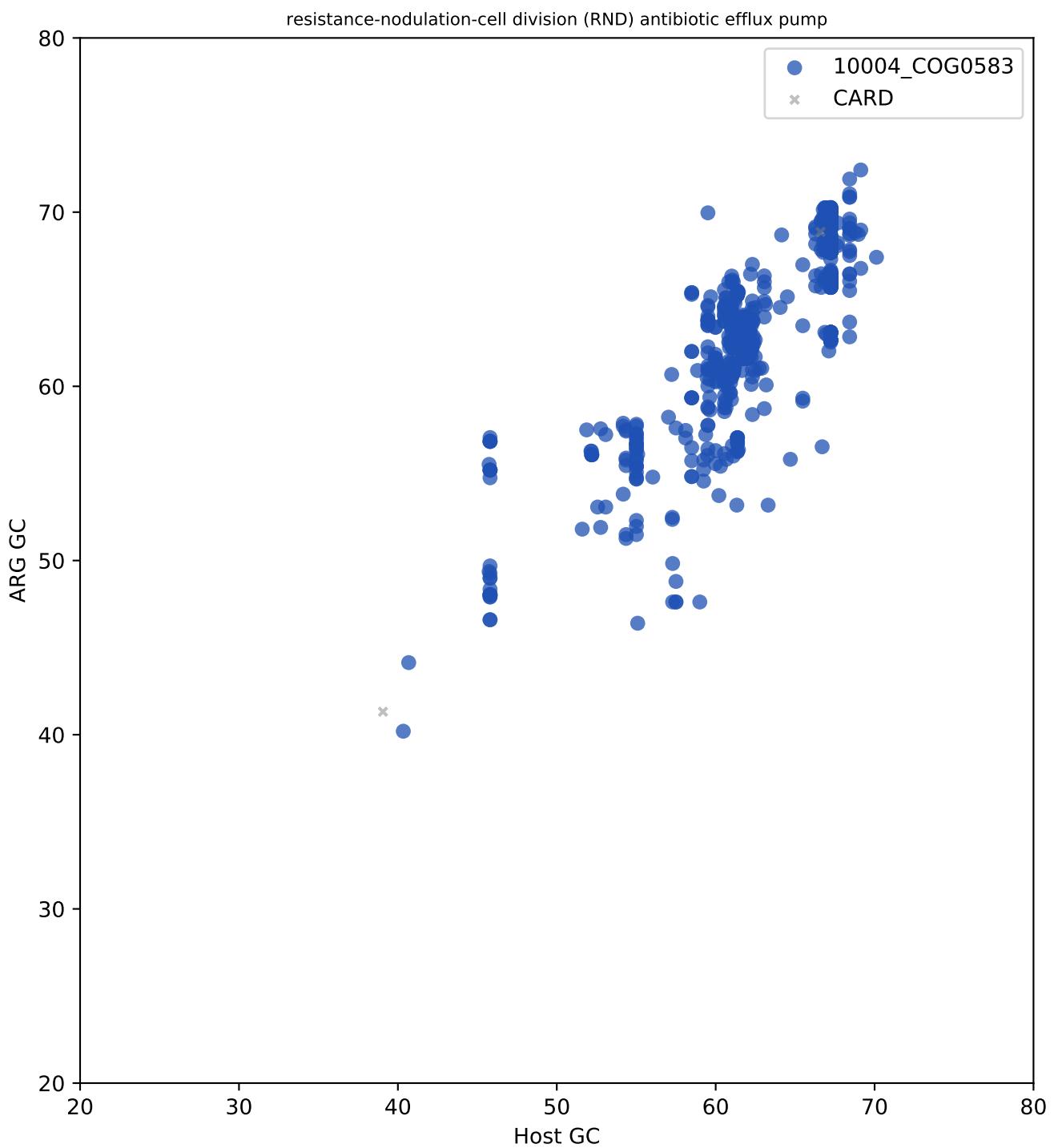


Supplementary Figure S1: (continued).

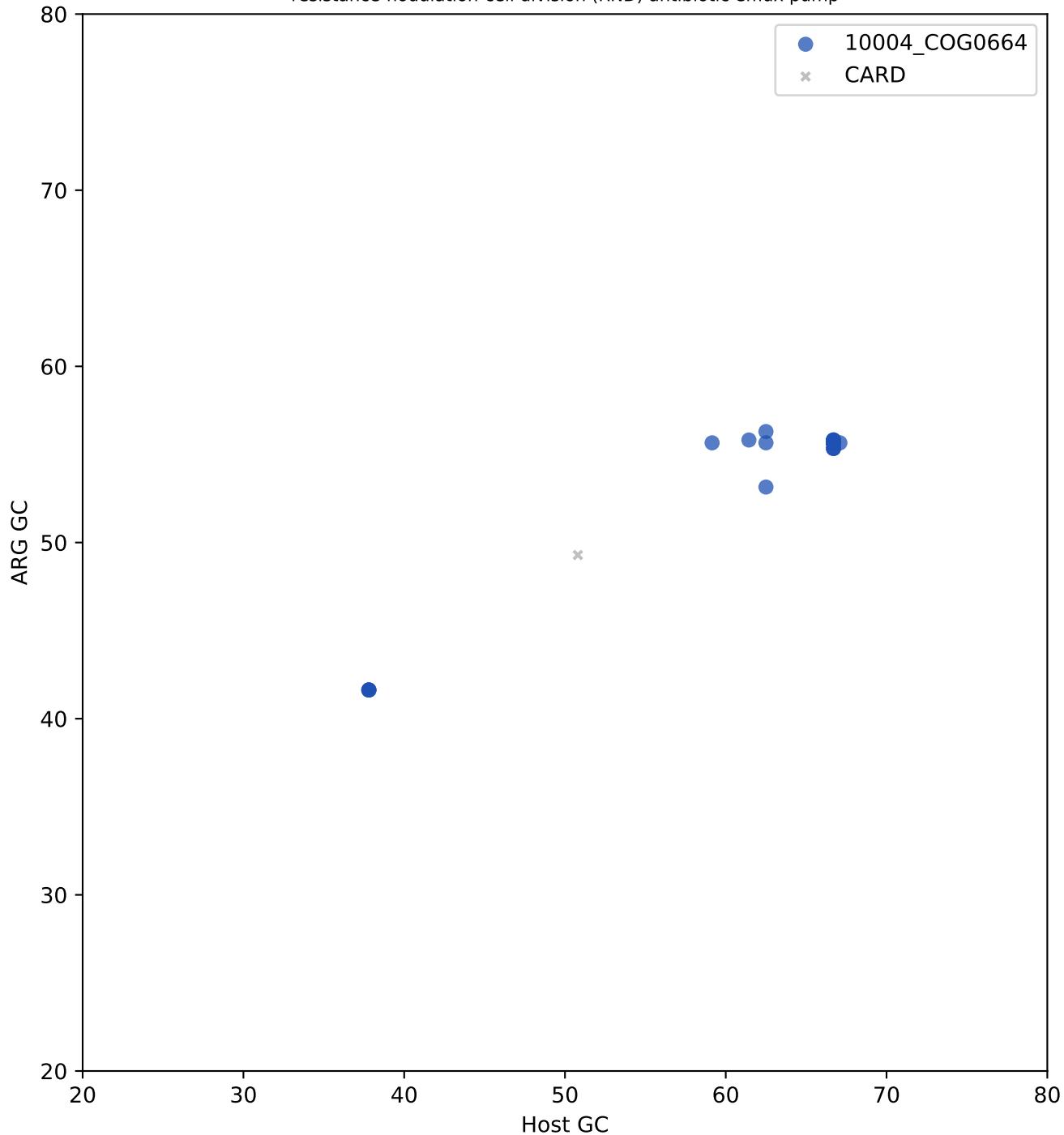
major facilitator superfamily (MFS) antibiotic efflux pump



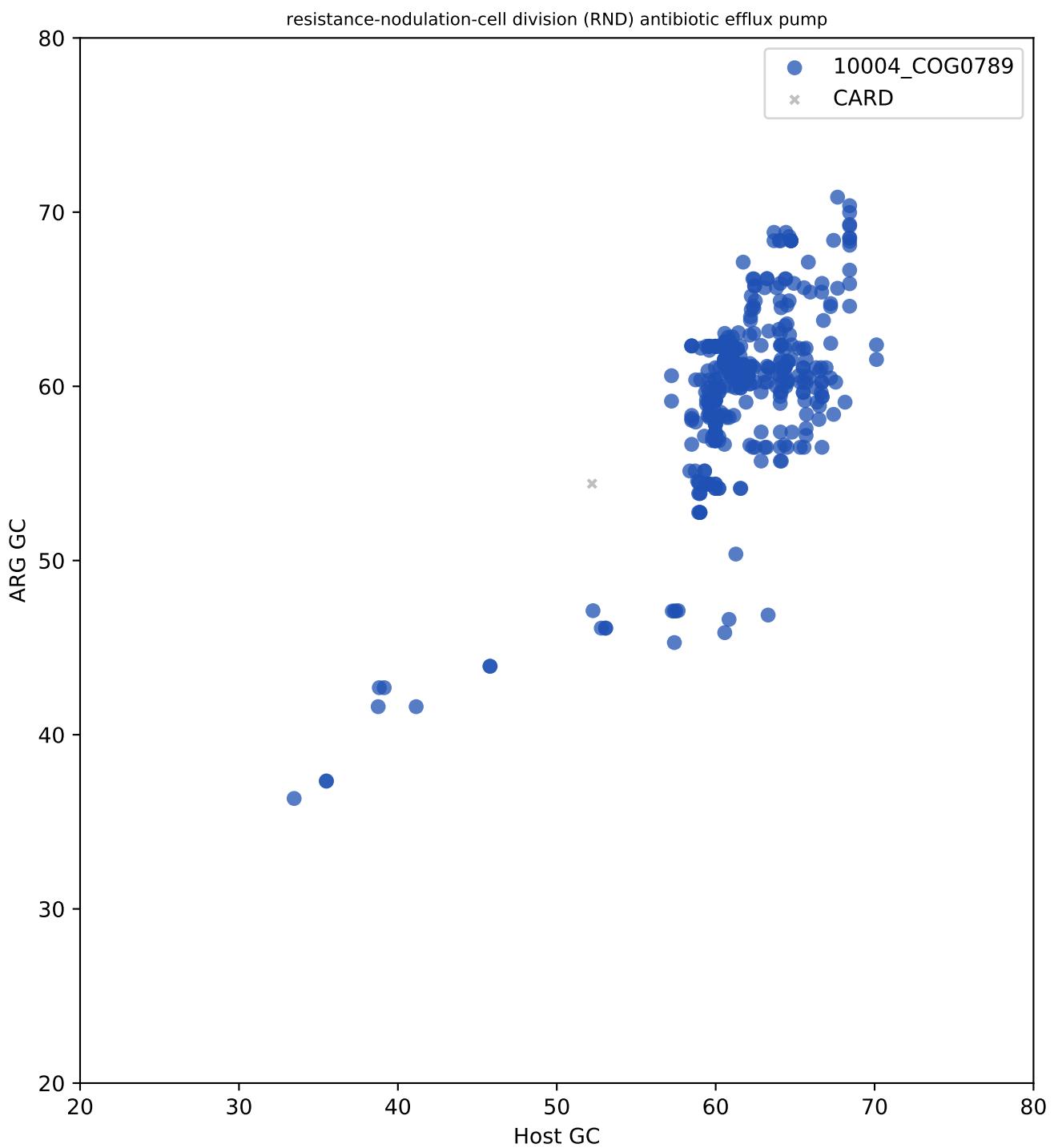
Supplementary Figure S1: (continued).



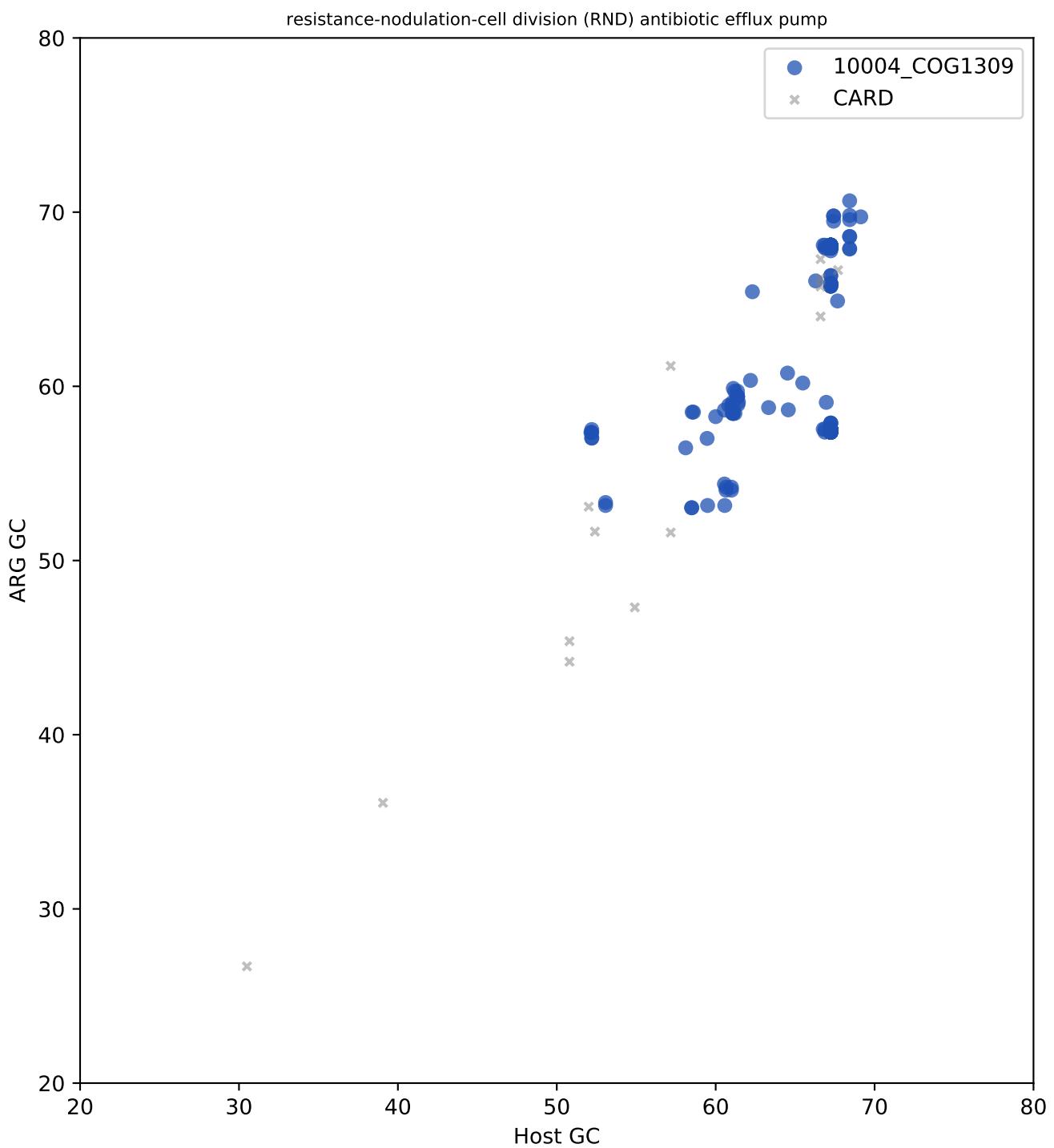
resistance-nodulation-cell division (RND) antibiotic efflux pump



Supplementary Figure S1: (continued).

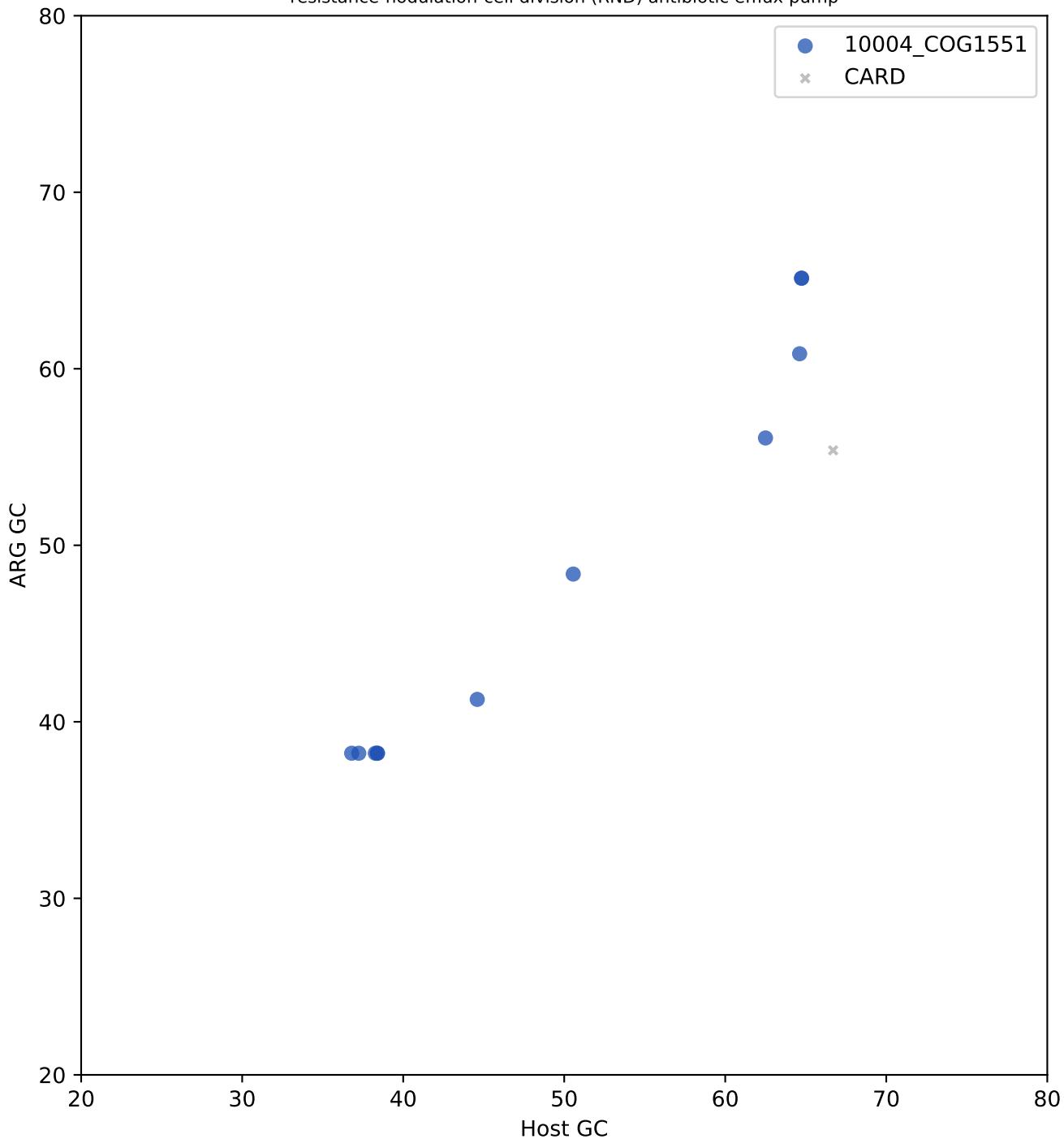


Supplementary Figure S1: (continued).

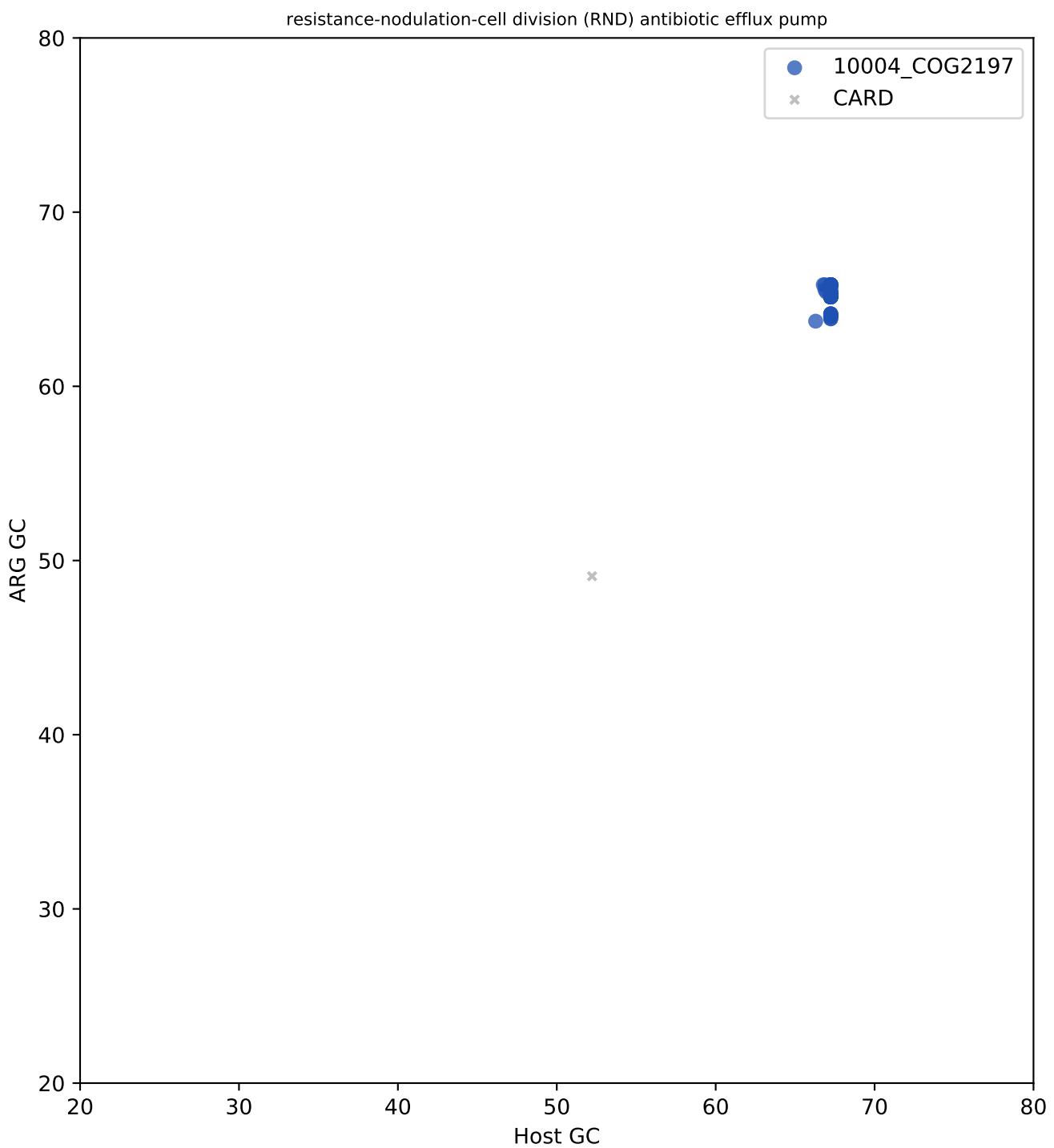


Supplementary Figure S1: (continued).

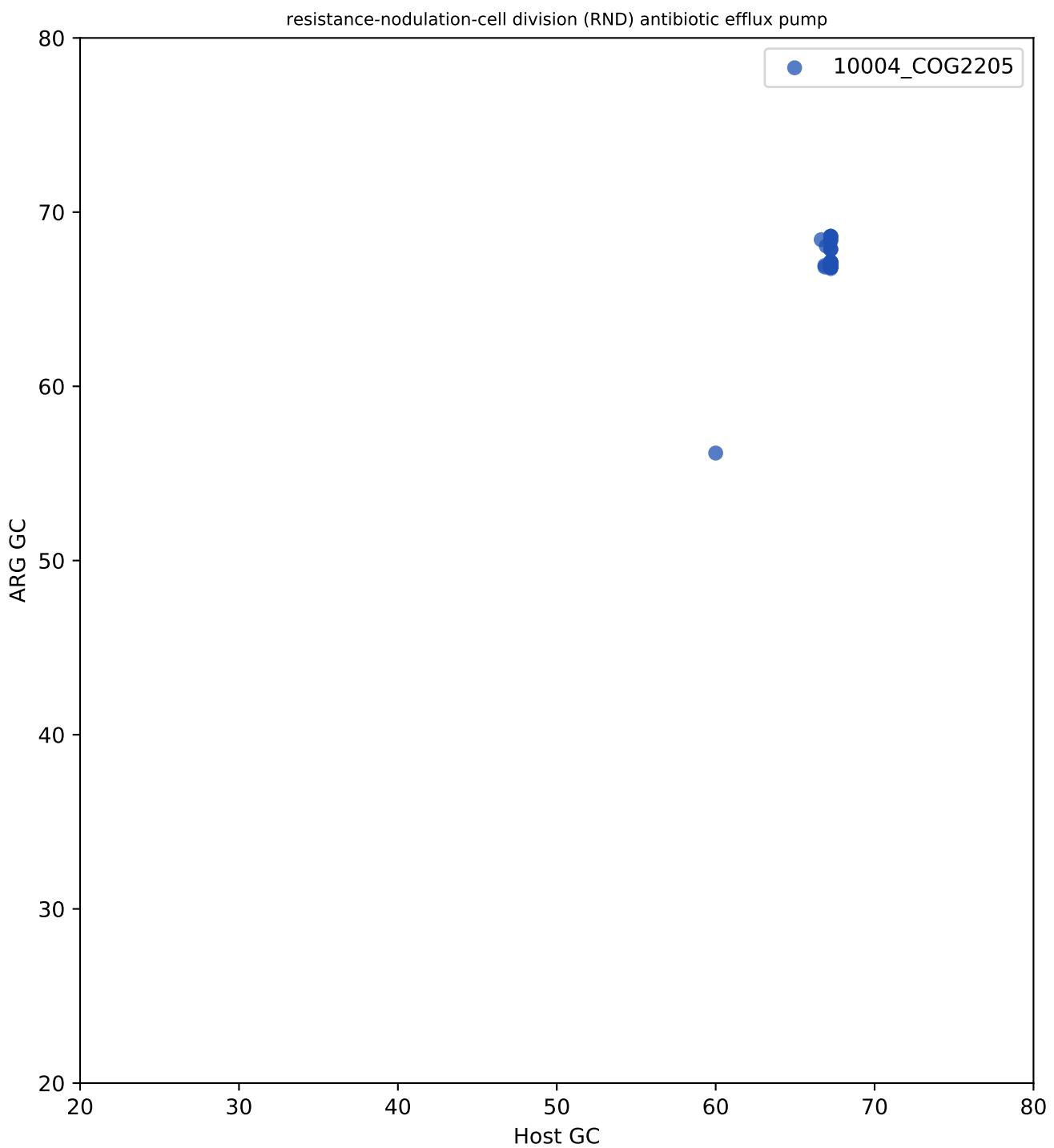
resistance-nodulation-cell division (RND) antibiotic efflux pump



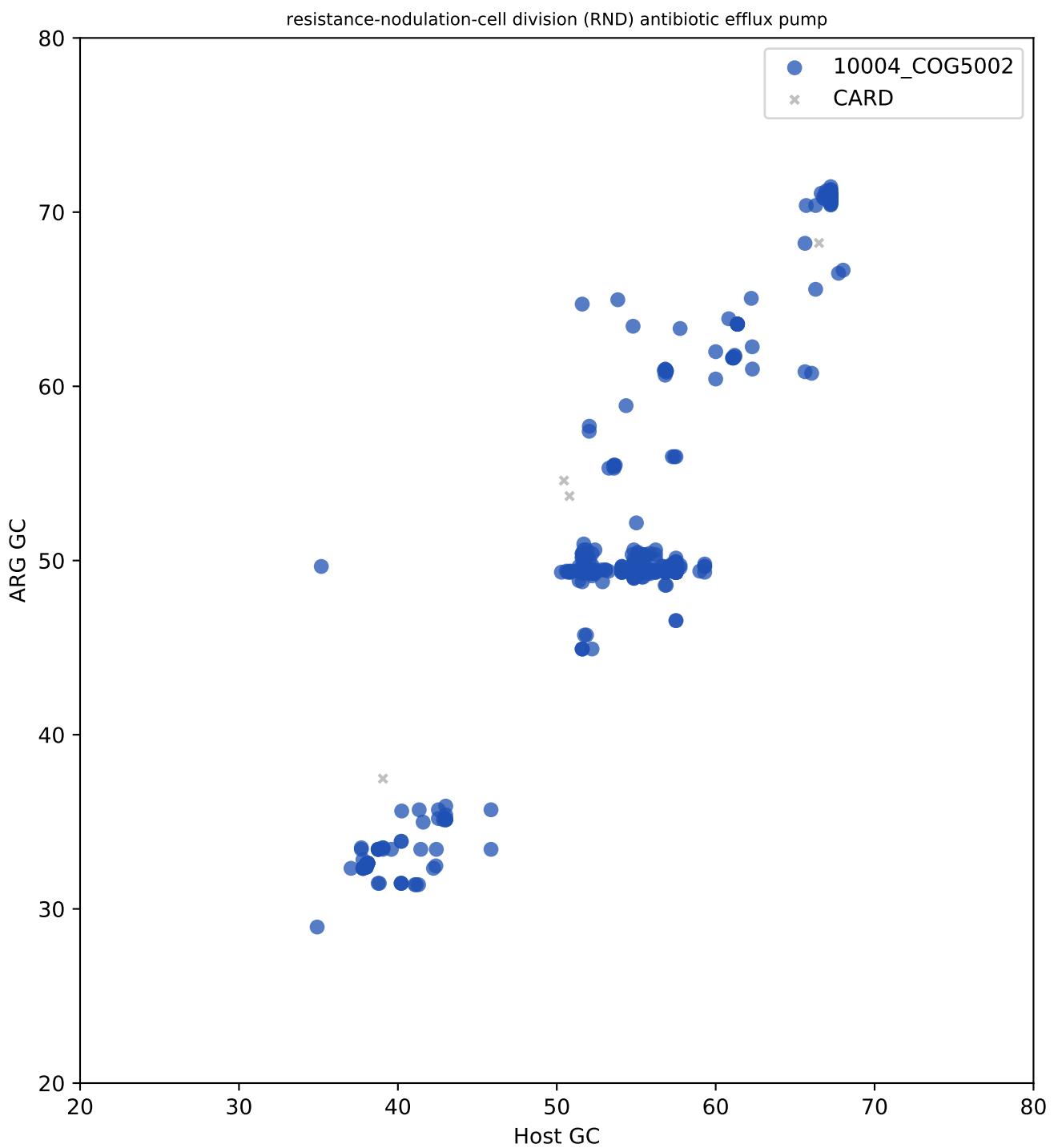
Supplementary Figure S1: (continued).



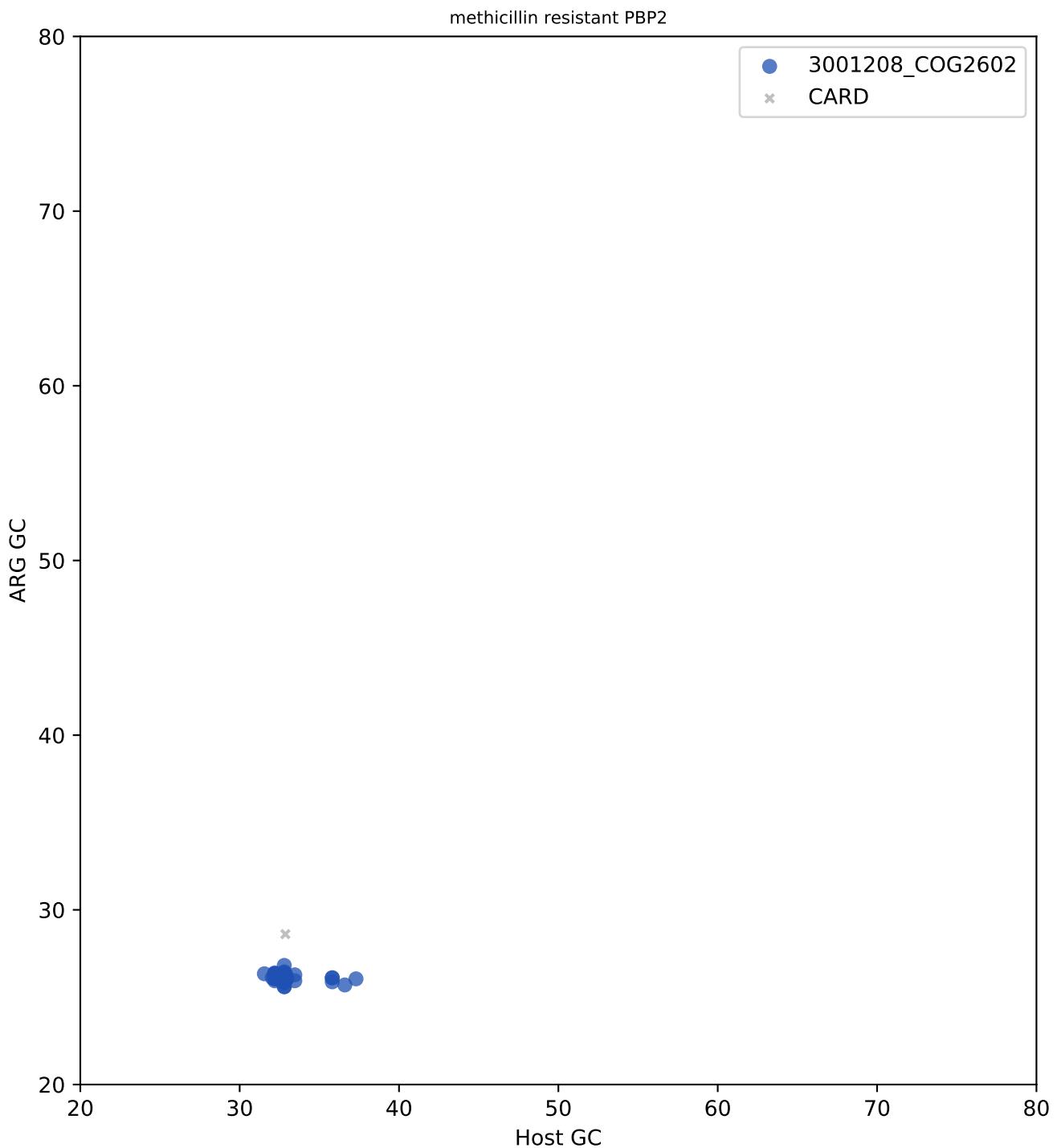
Supplementary Figure S1: (continued).



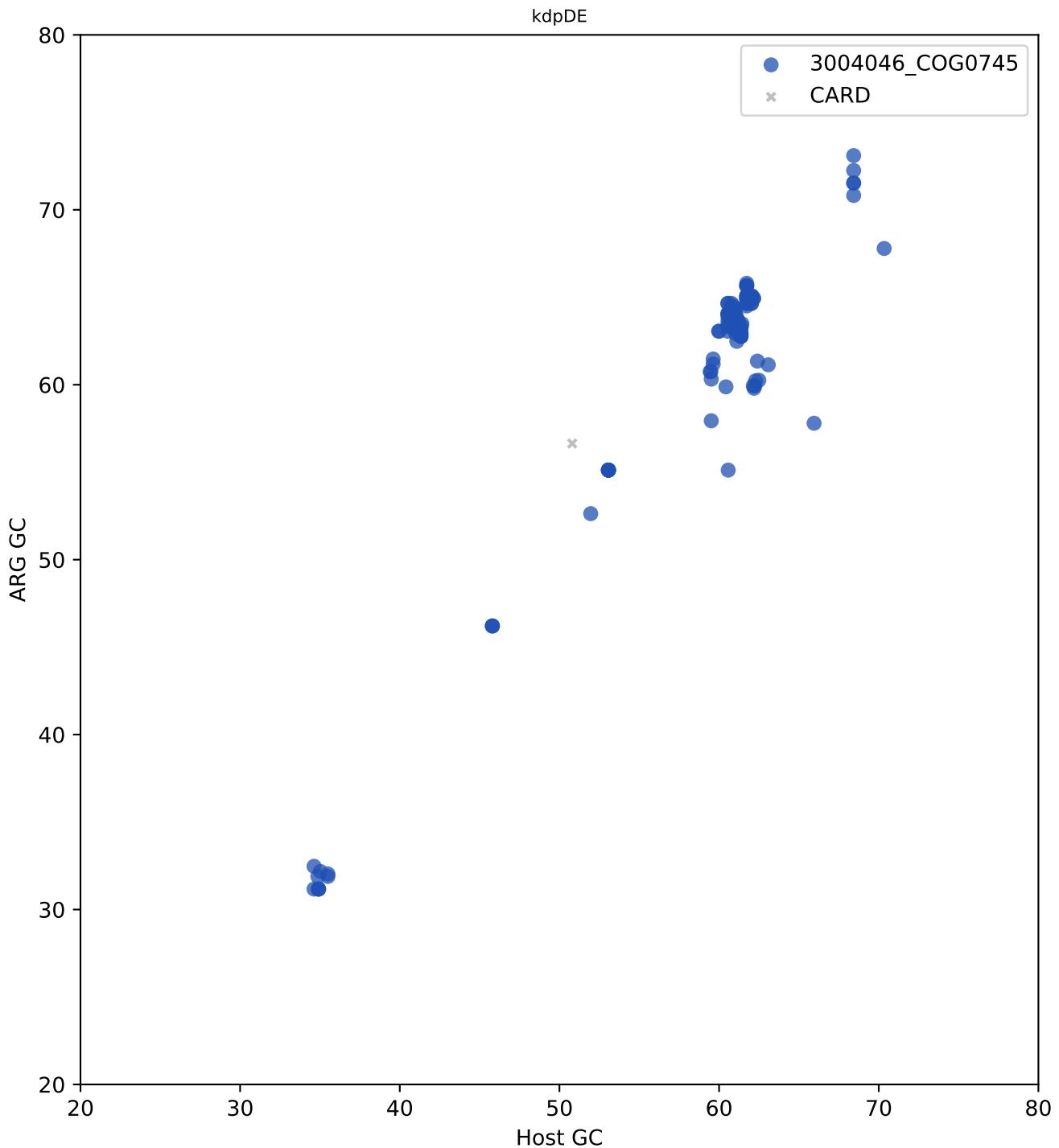
Supplementary Figure S1: (continued).



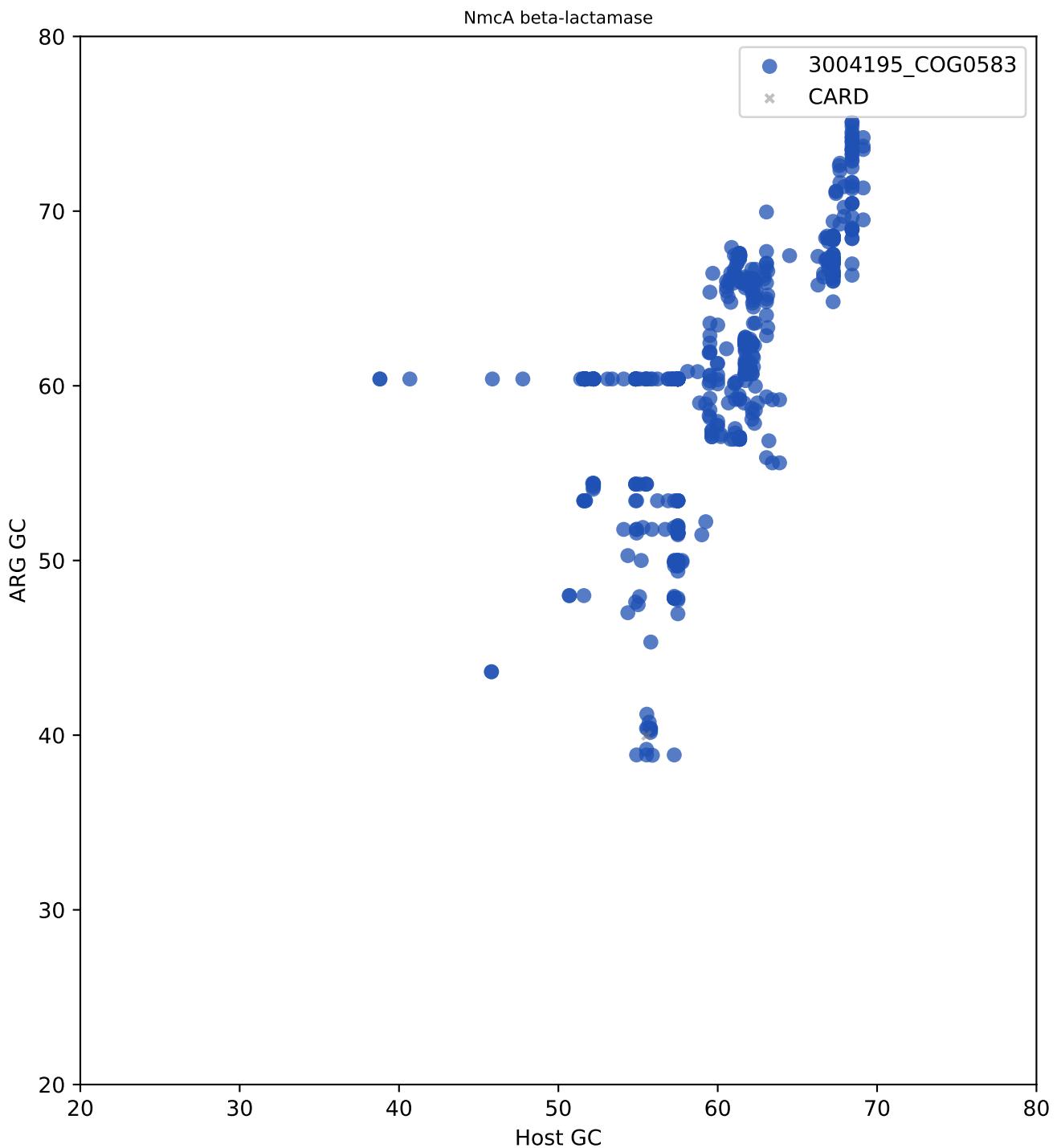
Supplementary Figure S1: (continued).



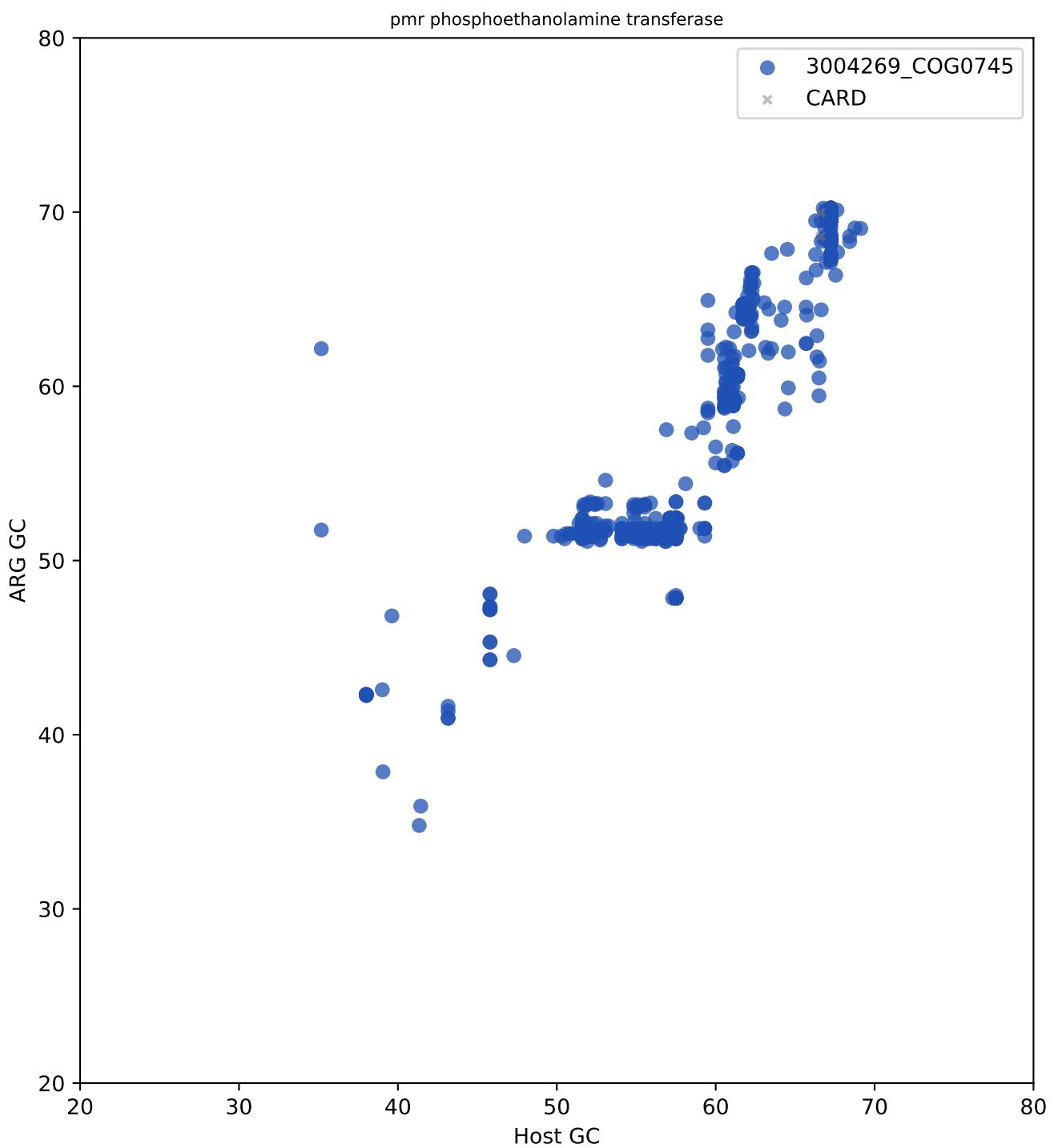
Supplementary Figure S1: (continued).



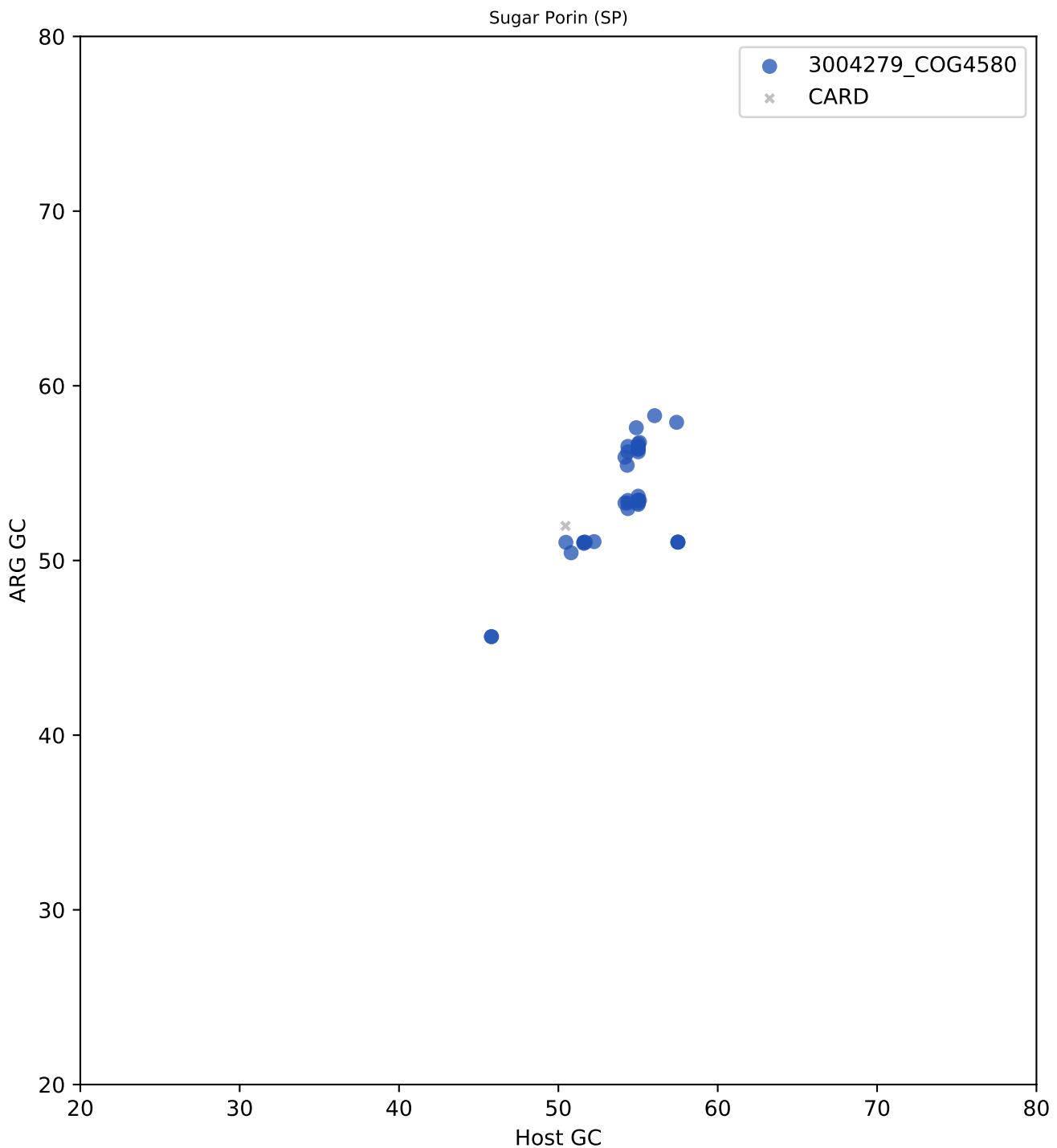
Supplementary Figure S1: (continued).



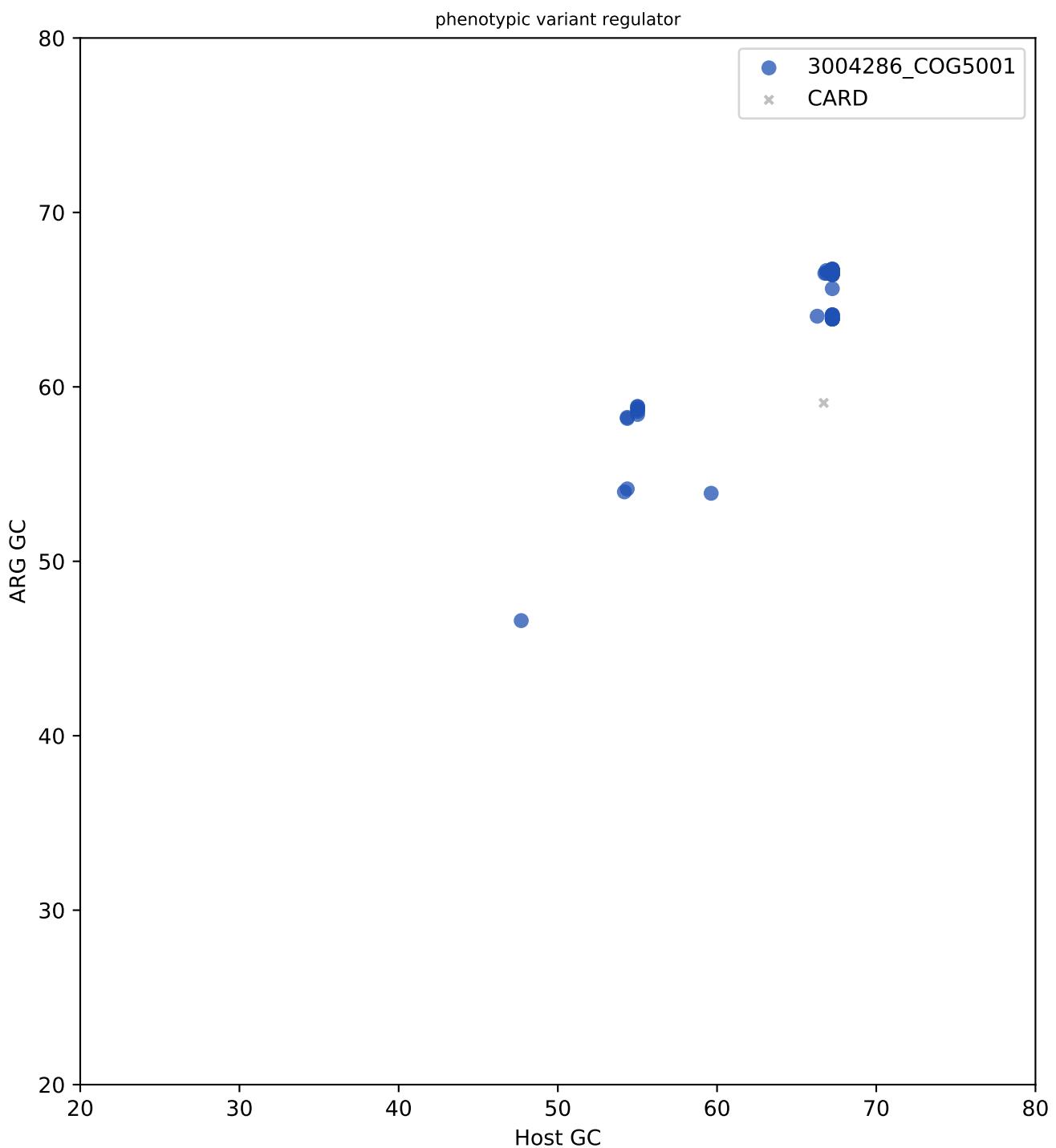
Supplementary Figure S1: (continued).



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Supplementary Figure S1: (continued).