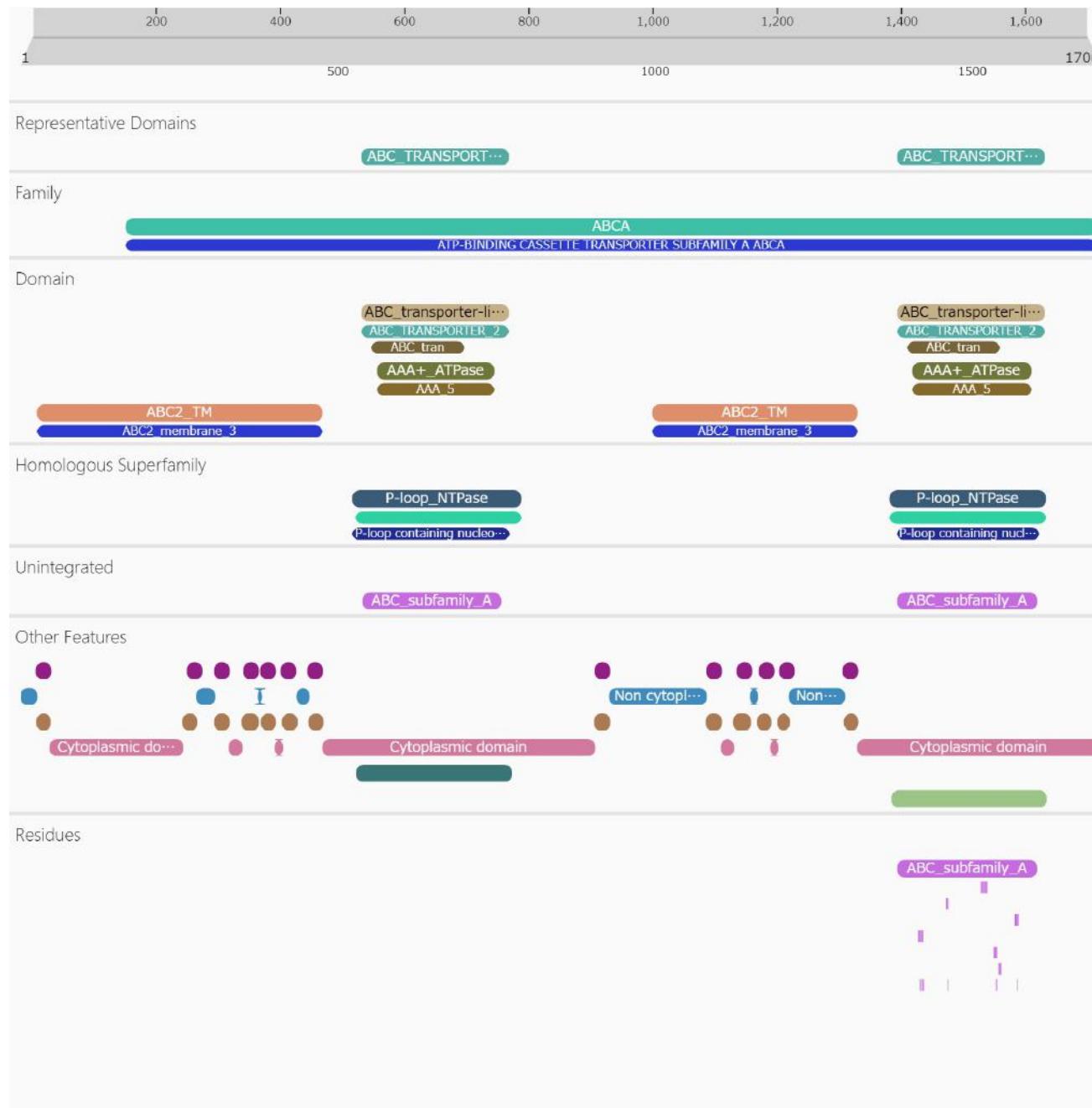
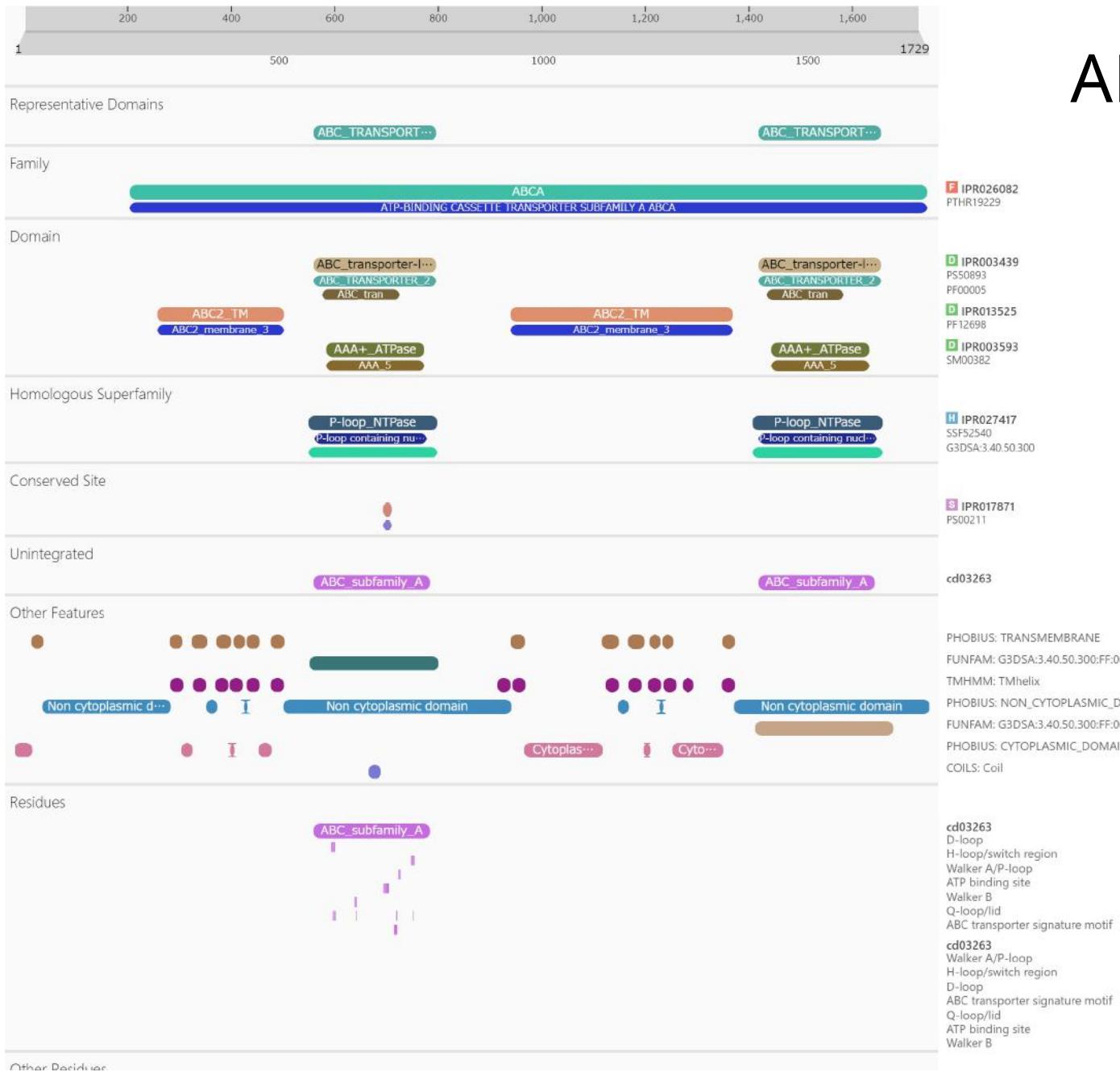


Supplementary Figure 4. Domain prediction of BmABC transporters defined in this study using InterPro.

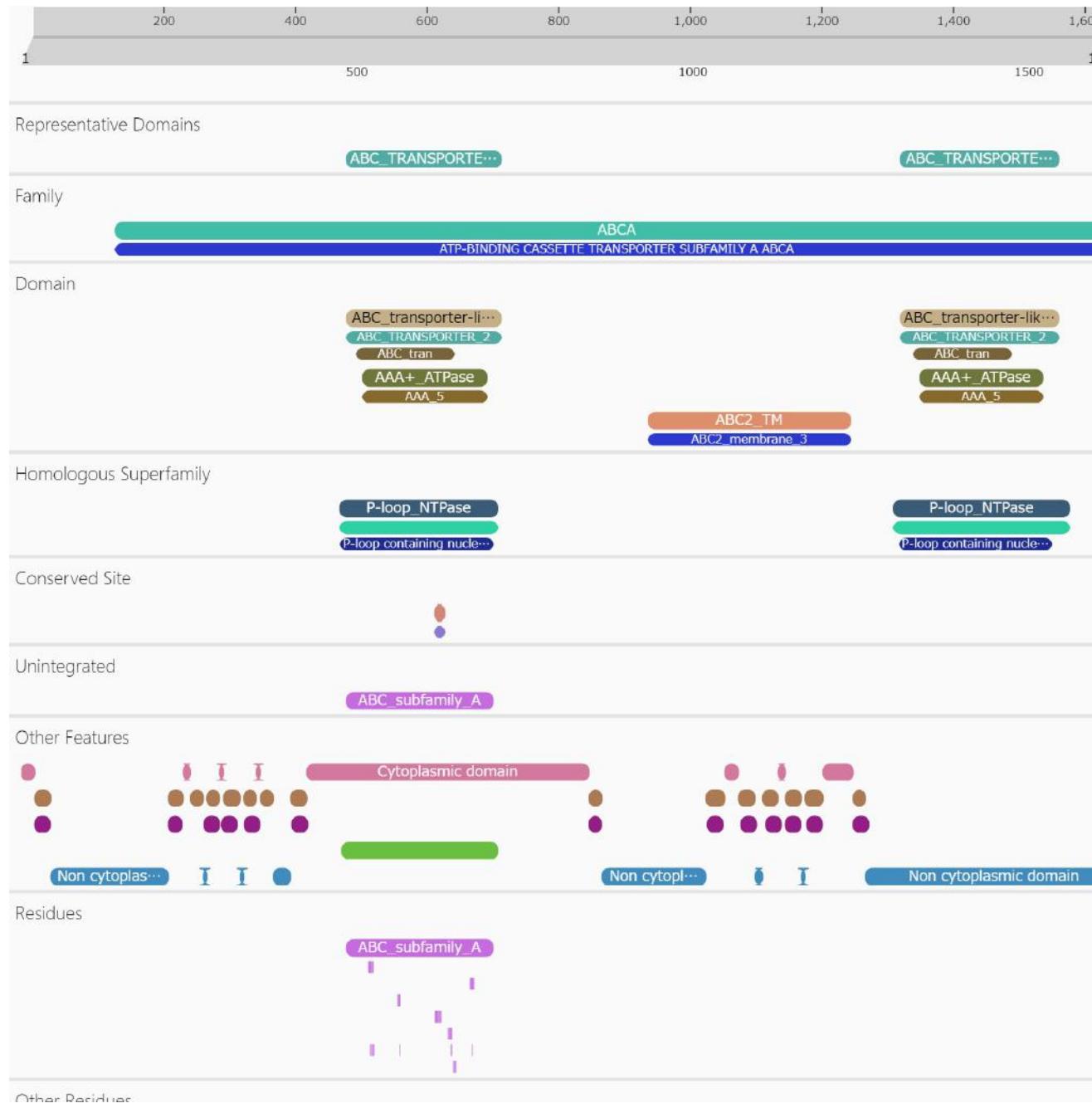
ABCA3



ABCA2



ABCA4



F IPR026082
PTHR19229

D IPR003439
PS50893
PF00005

D IPR003593
SM00382

D IPR013525
PF12698

H IPR027417
G3DSA:3.40.50.300
SSF52540

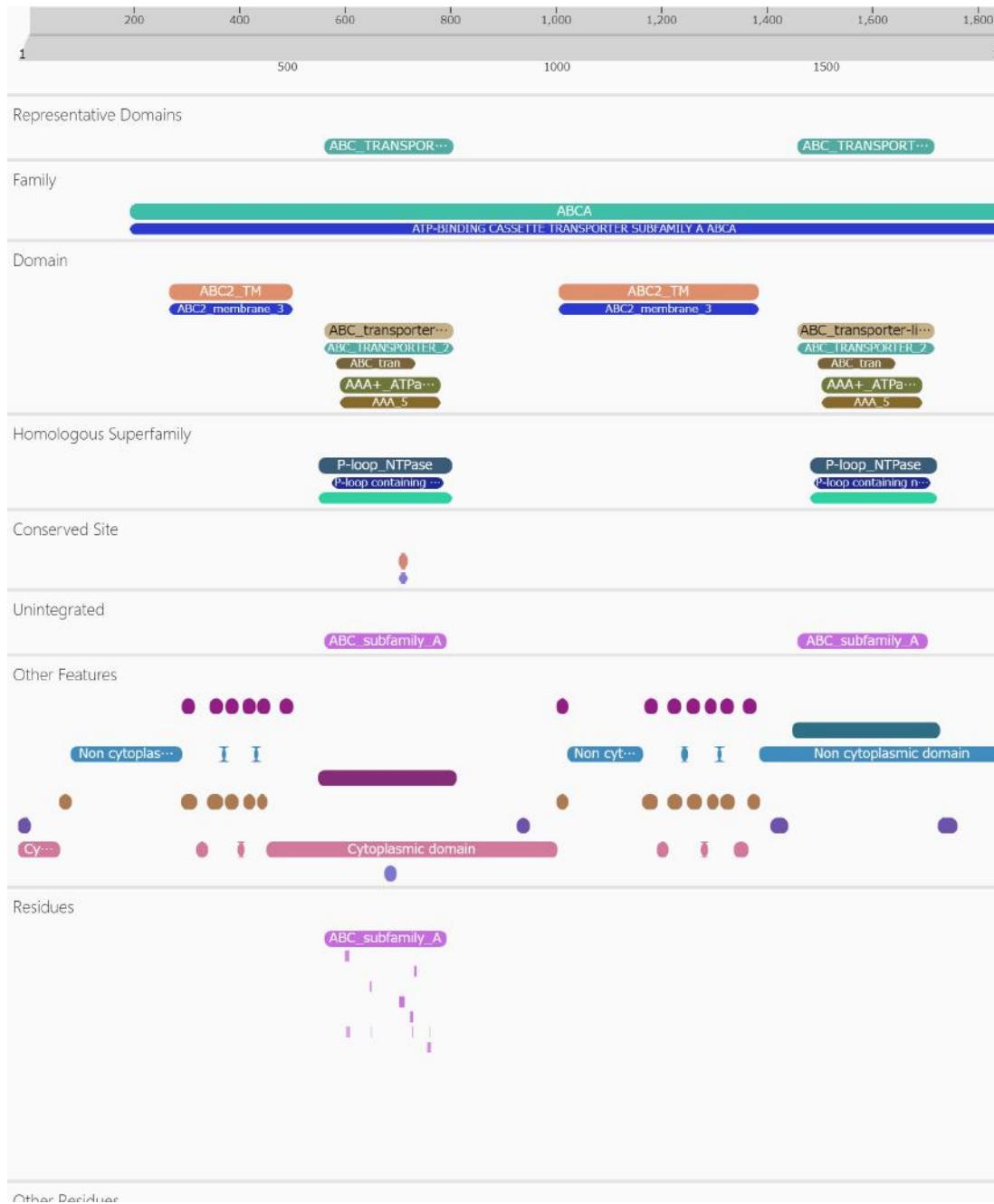
S IPR017871
PS00211

cd03263

PHOBIUS: CYTOPLASMIC_DOMAIN
PHOBIUS: TRANSMEMBRANE
TMHMM: TMhelix
FUNFAM: G3DSA:3.40.50.300:FF:002275
PHOBIUS: NON_CYTOPLASMIC_DOMAIN

cd03263
Walker A/P-loop
H-loop/switch region
Q-loop/lid
ABC transporter signature motif
Walker B
ATP binding site
D-loop

ABCA5



F IPR026022
PTHR19229

D IPR013525
PF12698

D IPR003439
PS50893
PF00005

D IPR003593
SM00382

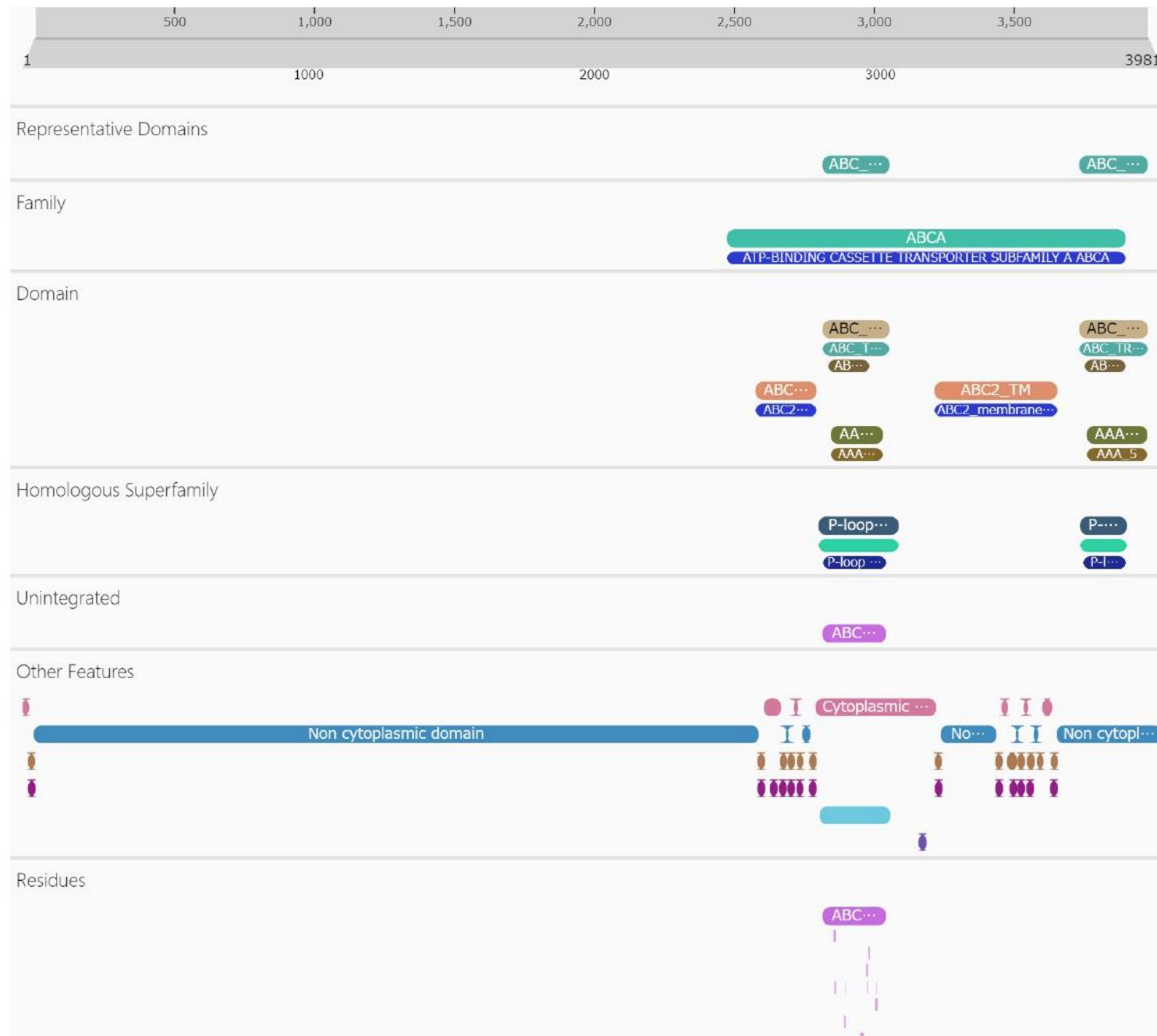
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G3DSA:3.40.50.30

S IPR017871
PS00211

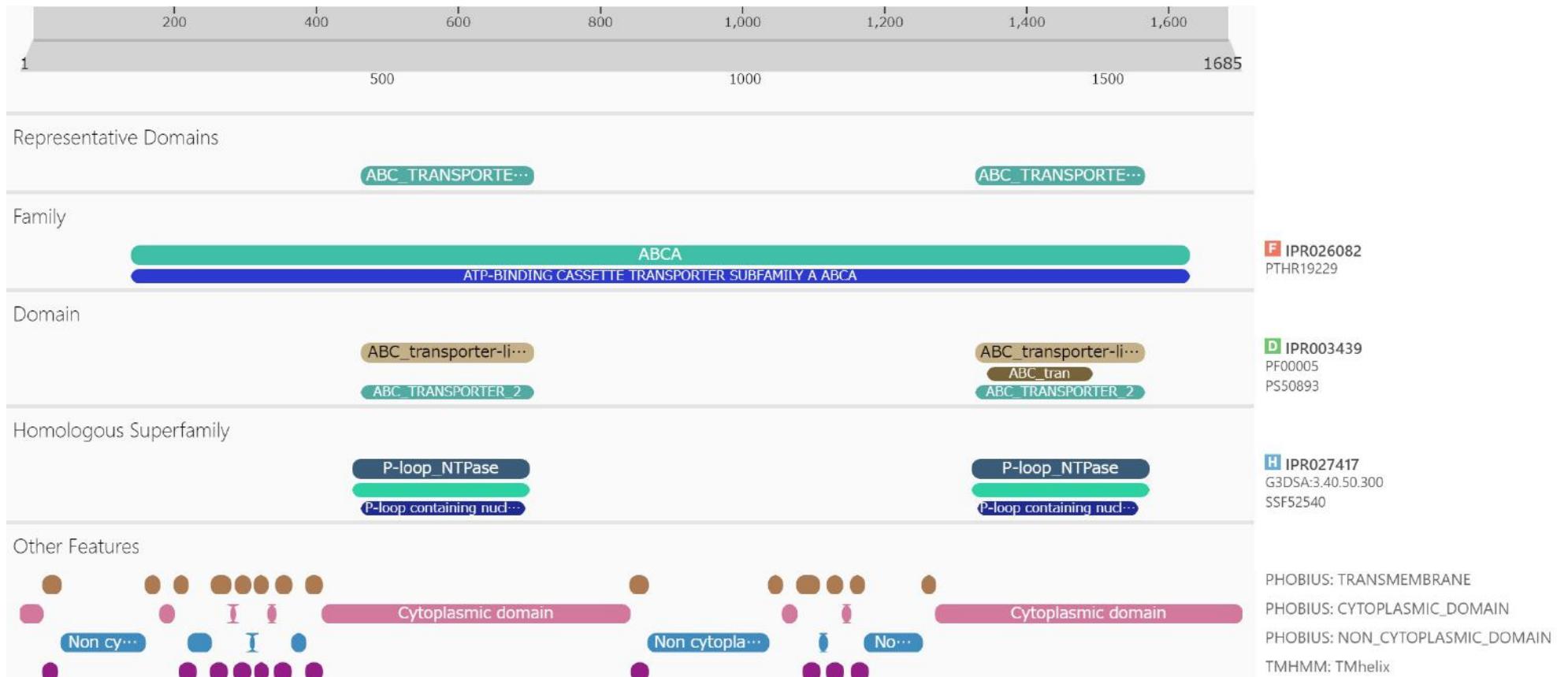
cd03263

TMHMM: TMhelix
FUNFAM: G3DSA:3.40.50.300:FF:000335
PHOBIIUS: NON_CYTOPLASMIC_DOMAIN
FUNFAM: G3DSA:3.40.50.300:FF:000933
PHOBIIUS: TRANSMEMBRANE
MOBIDB LITE: mobidb-lite
PHOBIIUS: CYTOPLASMIC_DOMAIN
COILS: Coil

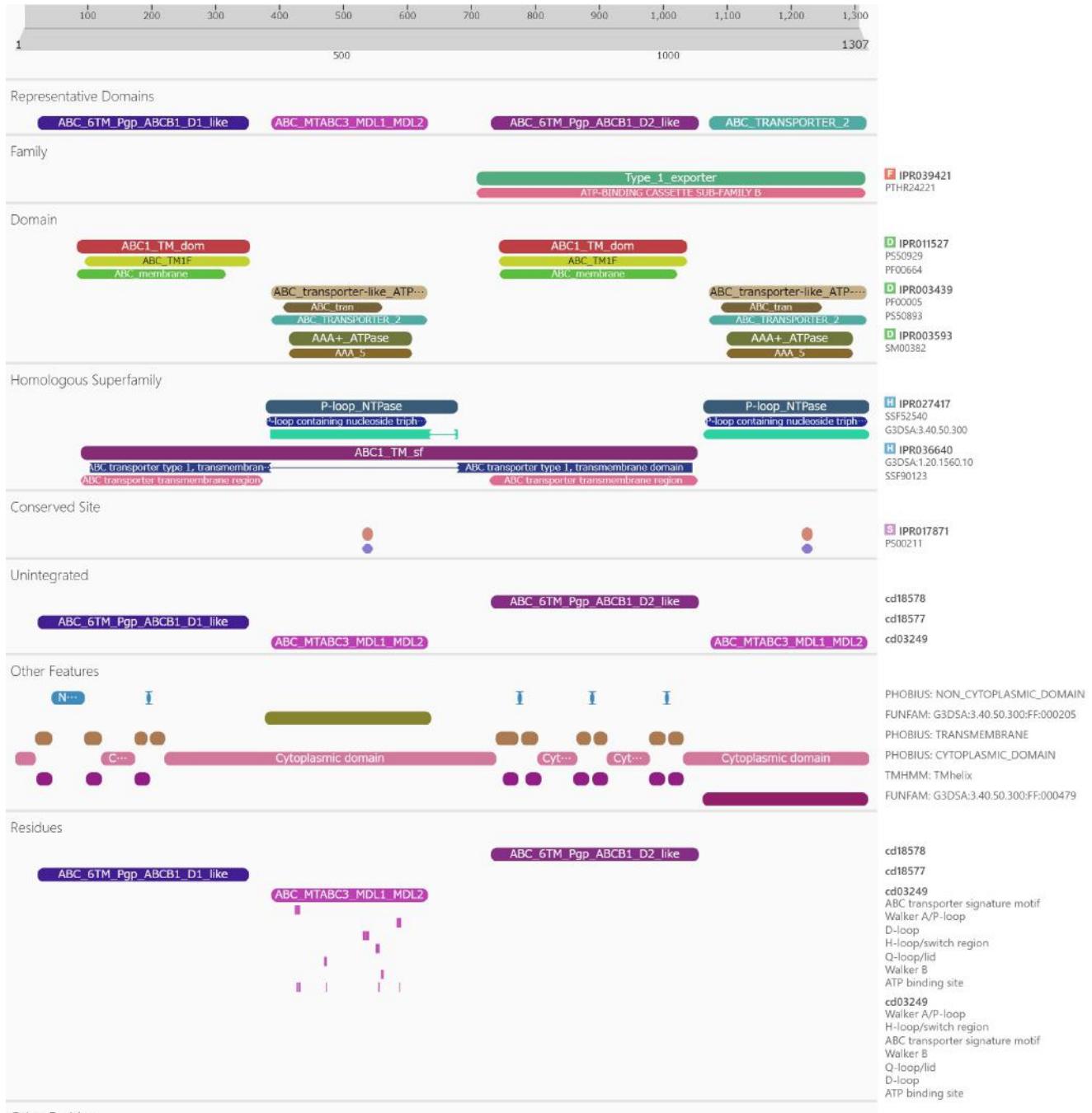
cd03263
Q-loop/lid
Walker A/P-loop
ABC transporter signature motif
ATP binding site
Walker B
D-loop
H-loop/switch region
cd03263
Walker A/P-loop
D-loop
Q-loop/lid
ABC transporter signature motif
Walker B
ATP binding site
H-loop/switch region



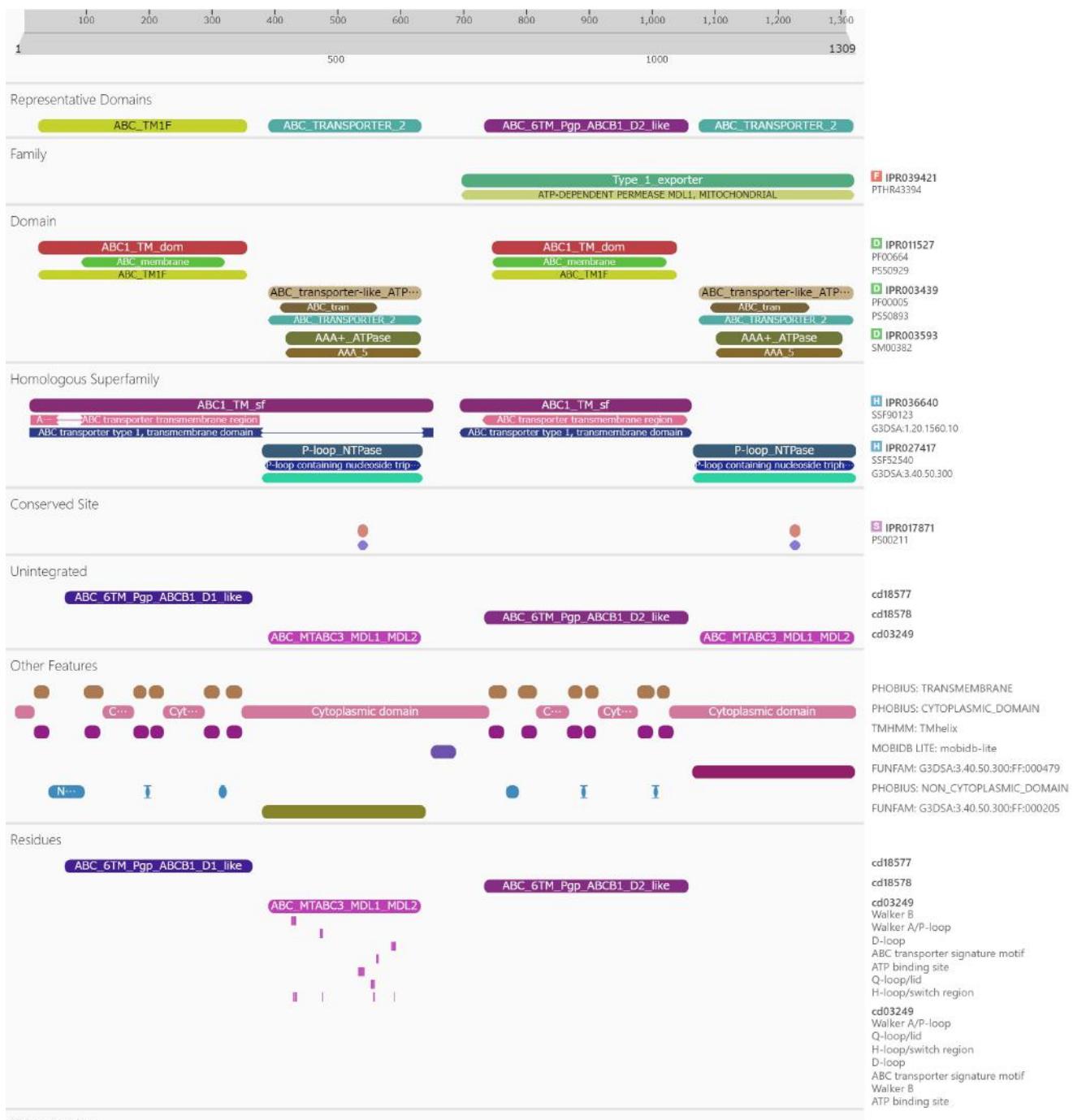
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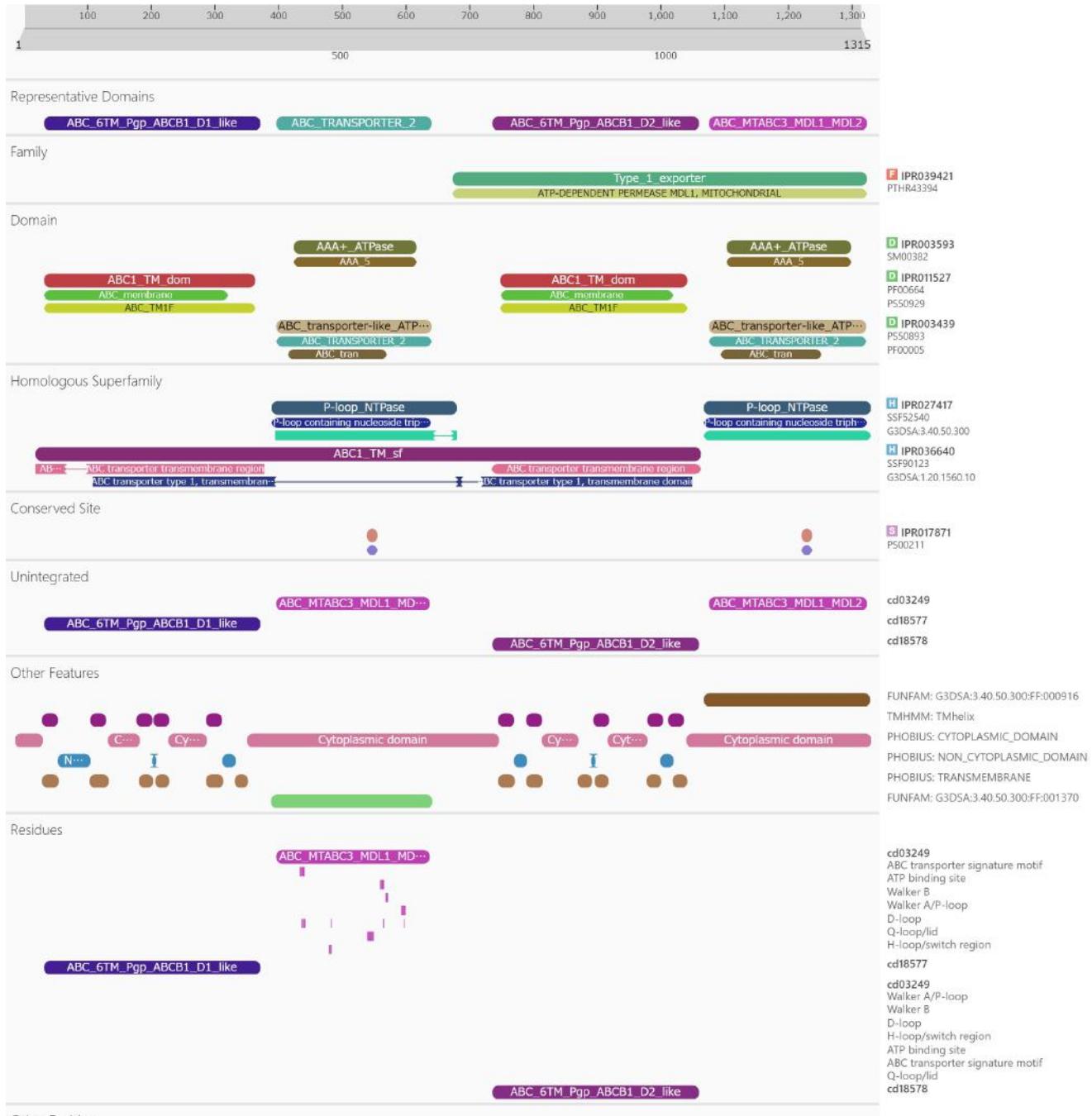
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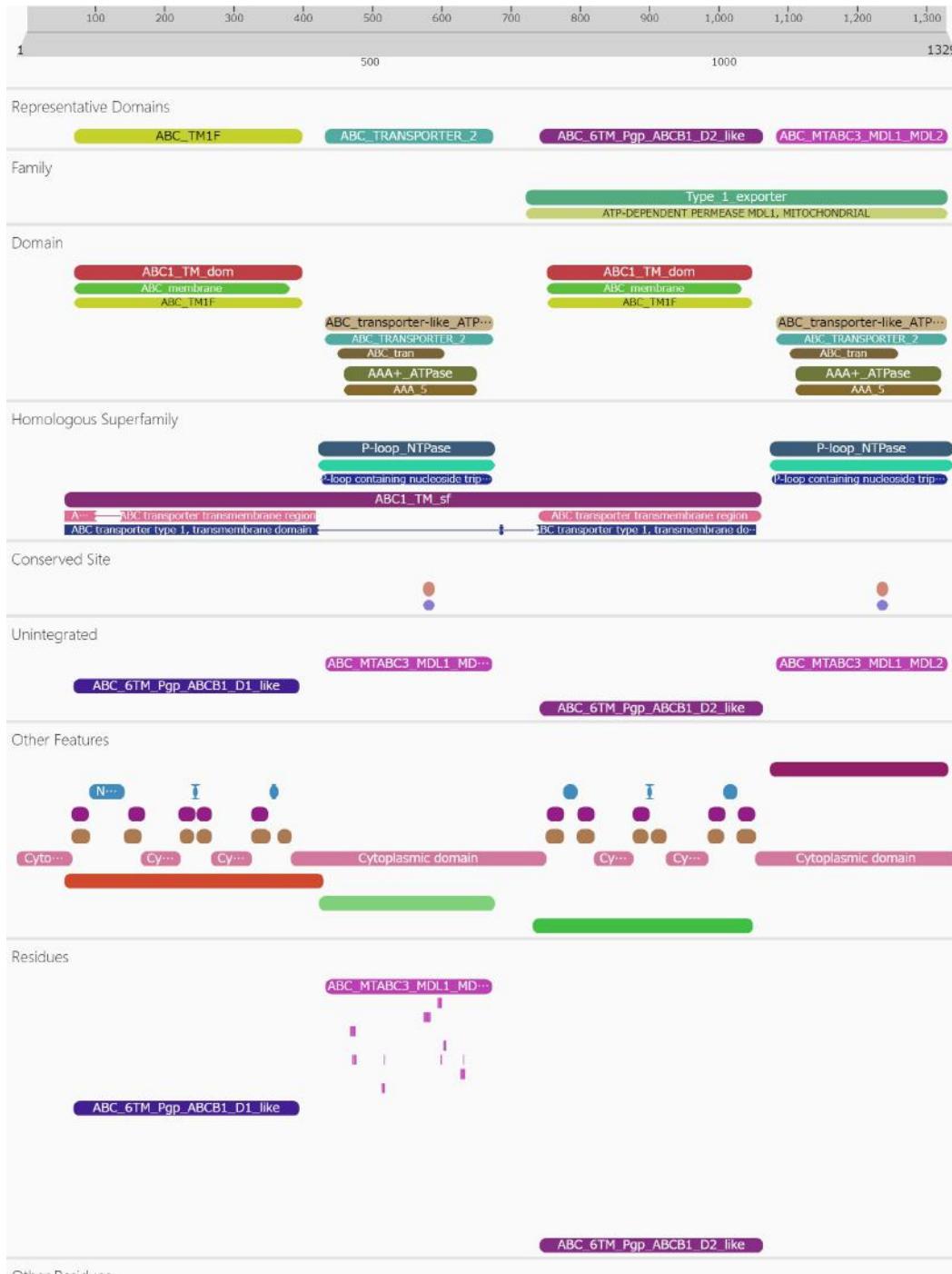
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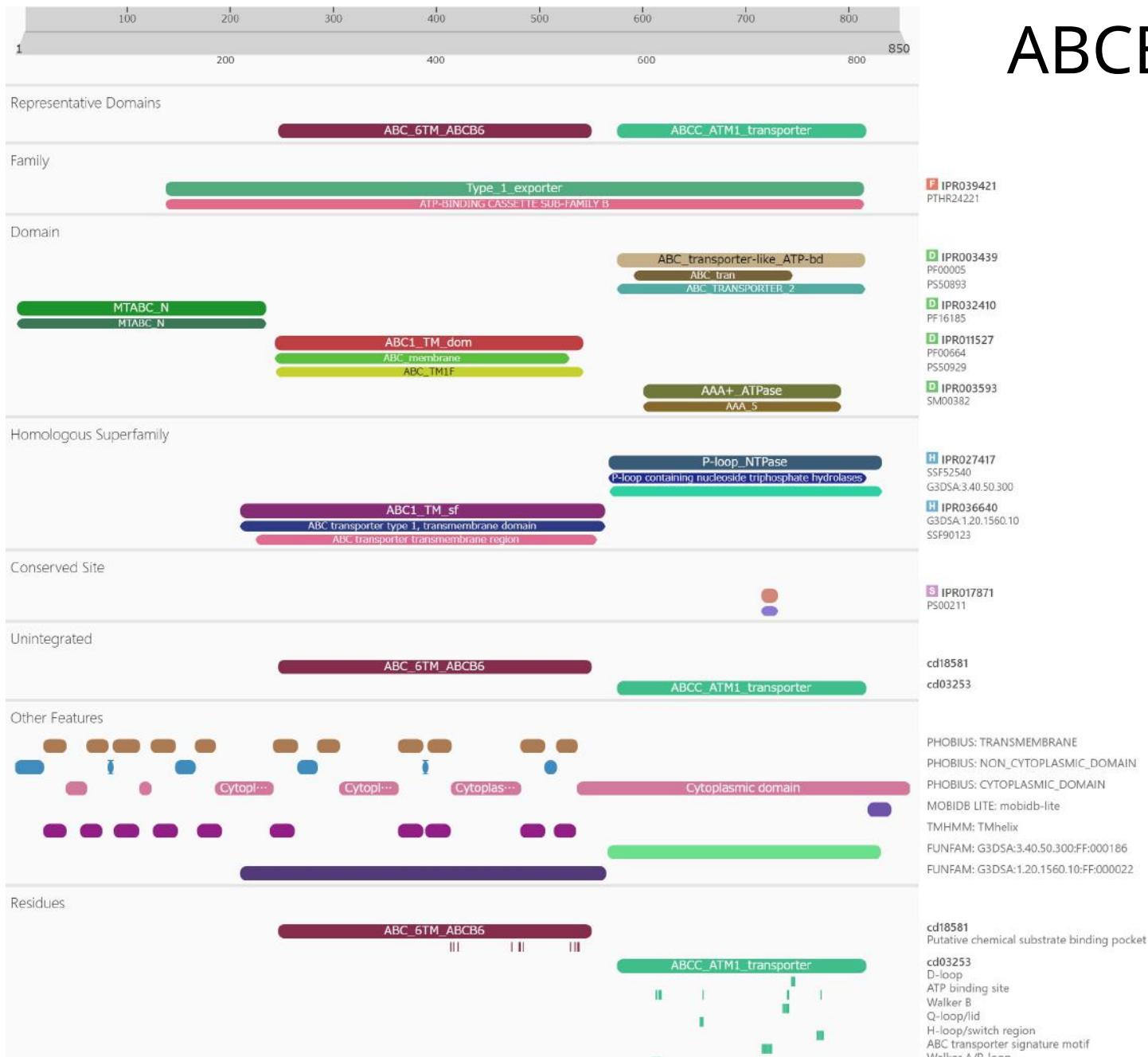
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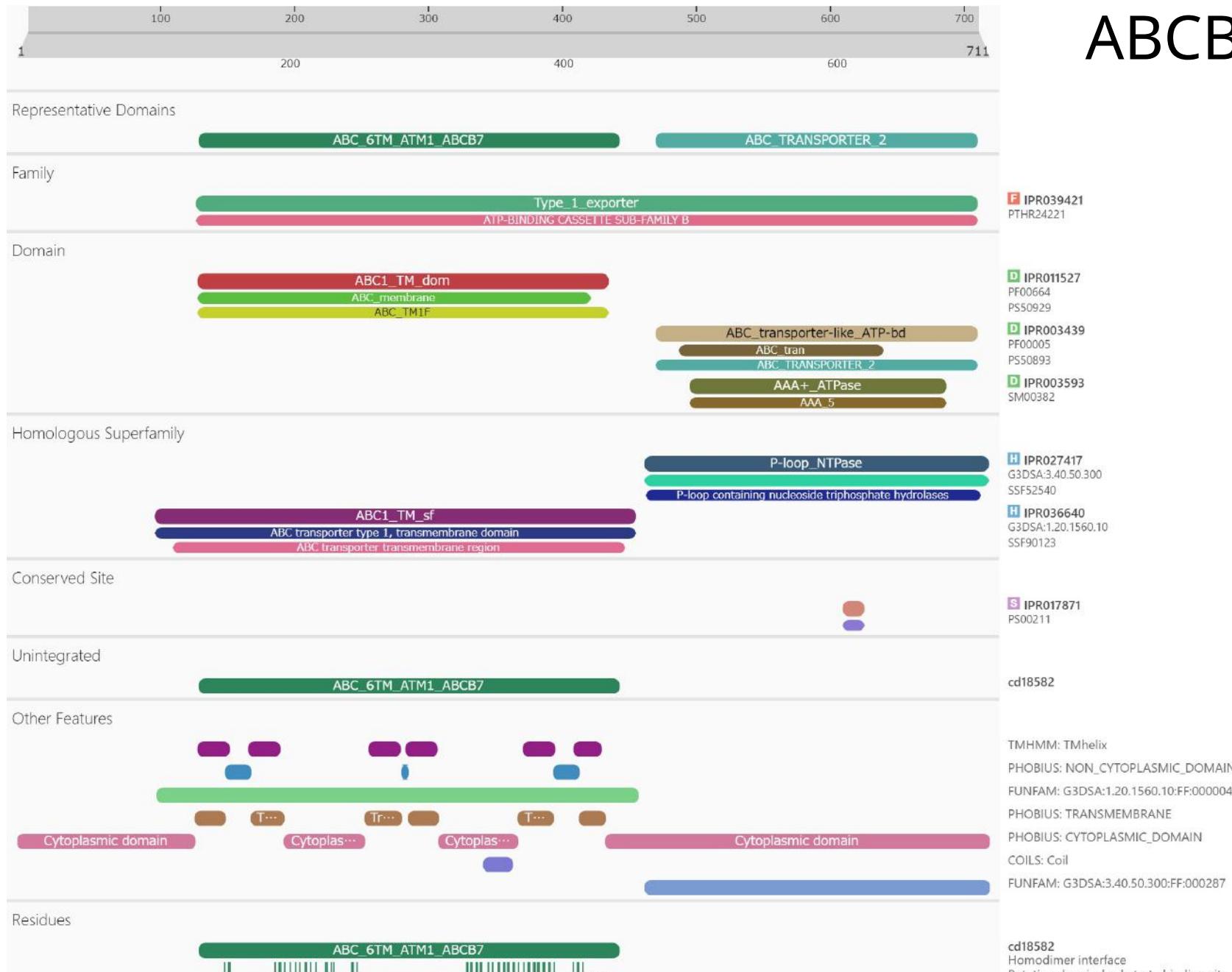
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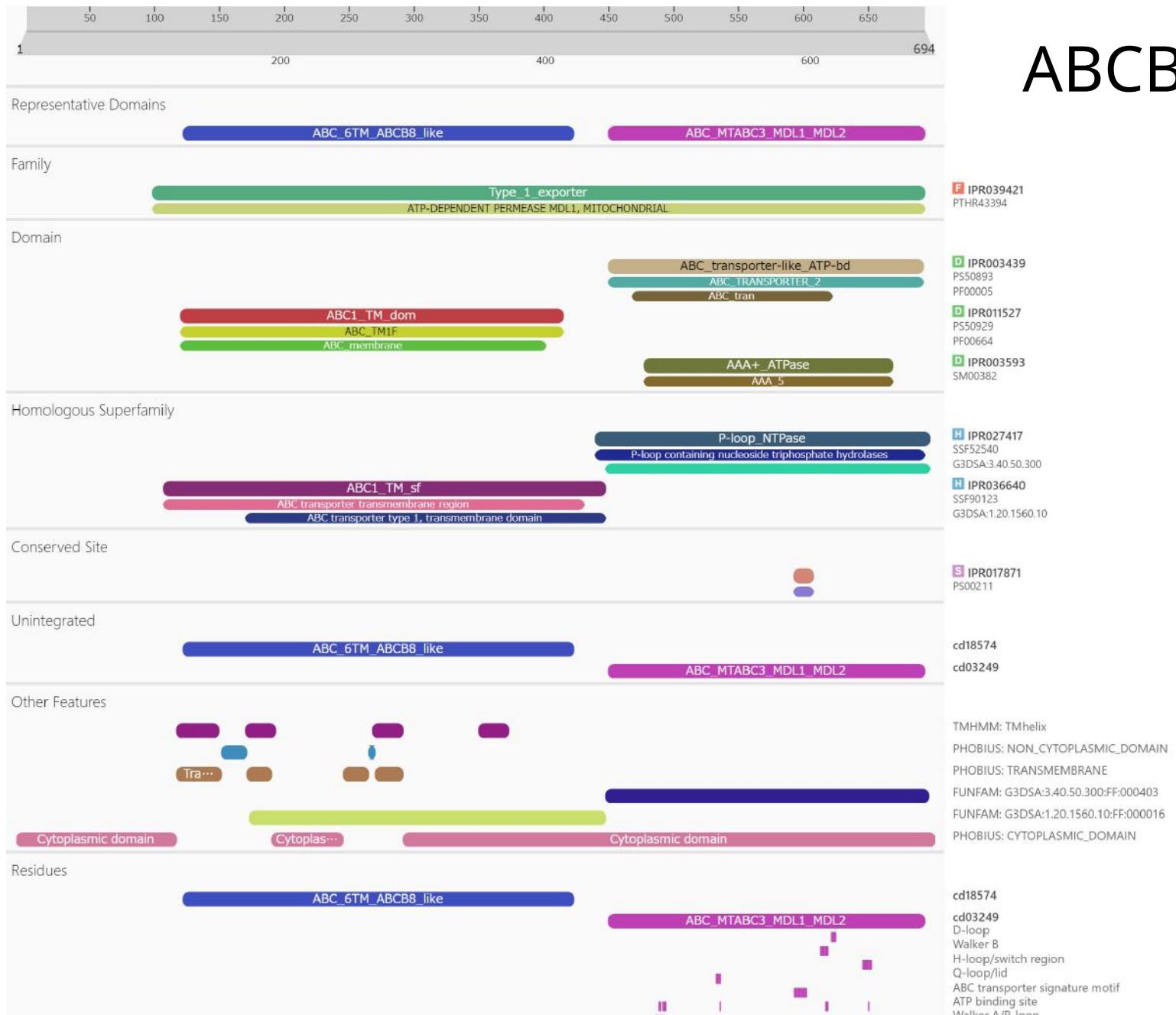
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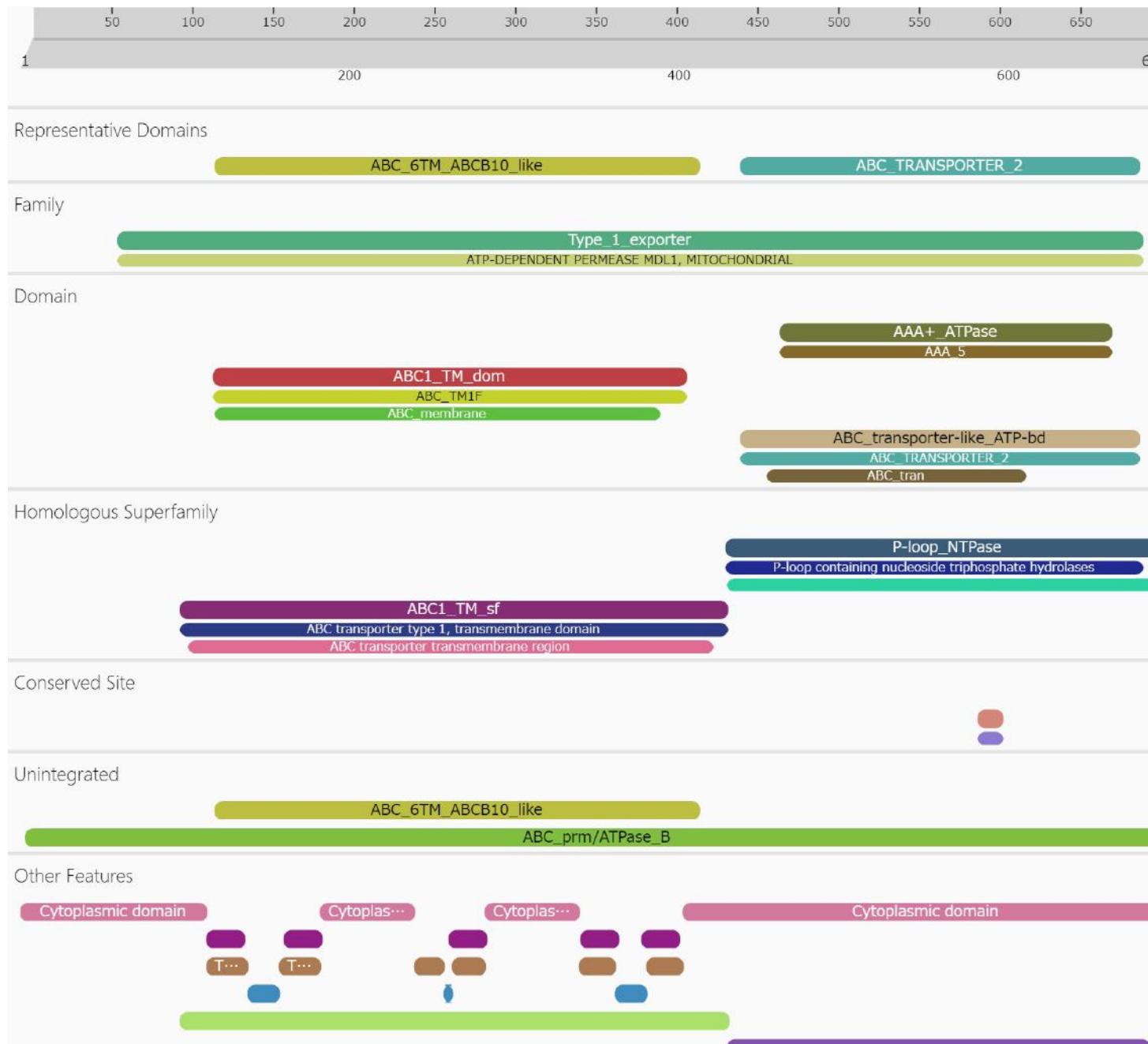
ABCB6



ABCB7



ABCB8



F IPR039421
PTHR43394

D IPR003593
SM00382

D IPR011527
PS50929
PF00664

D IPR003439
PS50893
PF00005

H IPR027417
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G3DSA:3.40.50.300

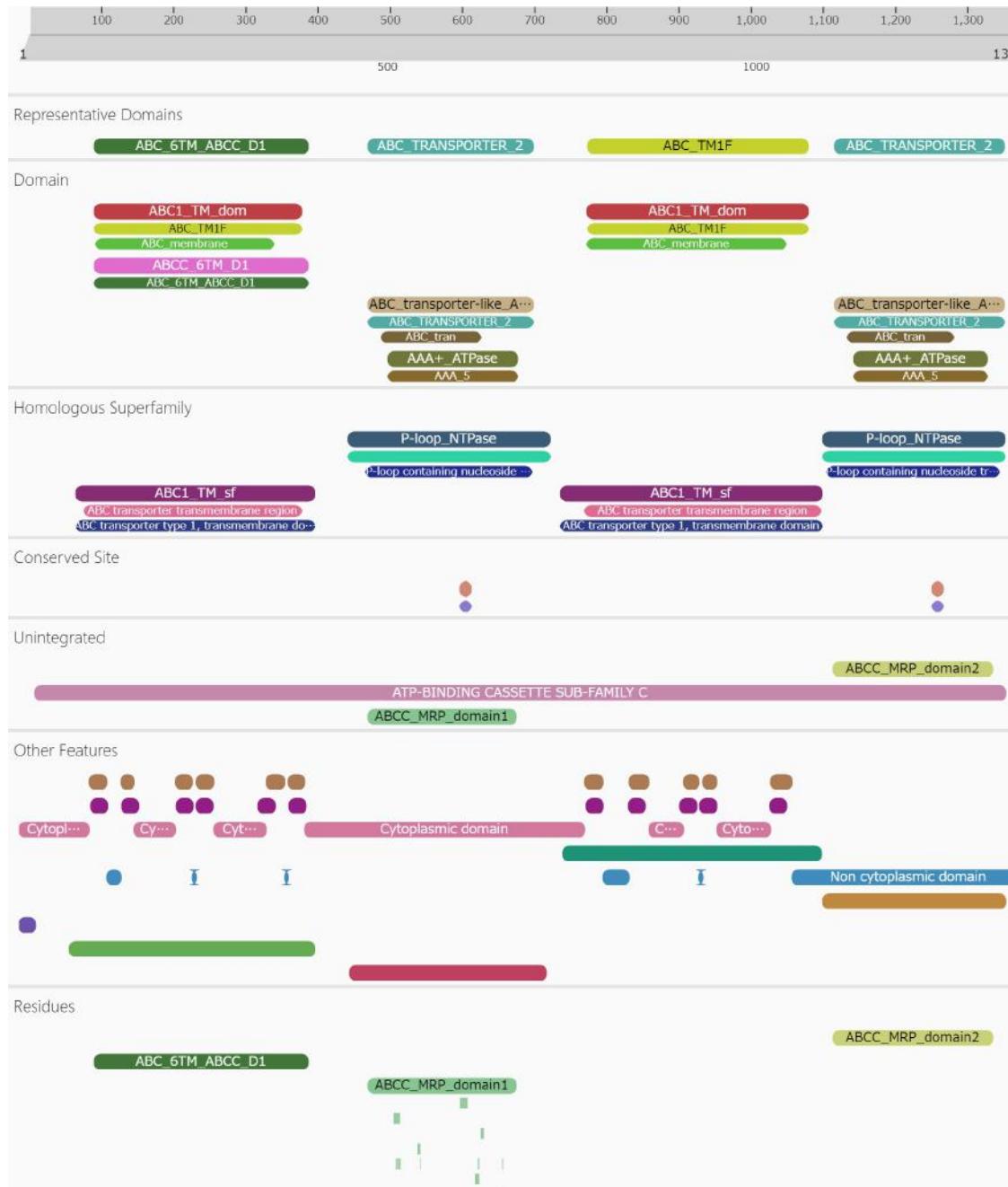
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S IPR017871
PS00211

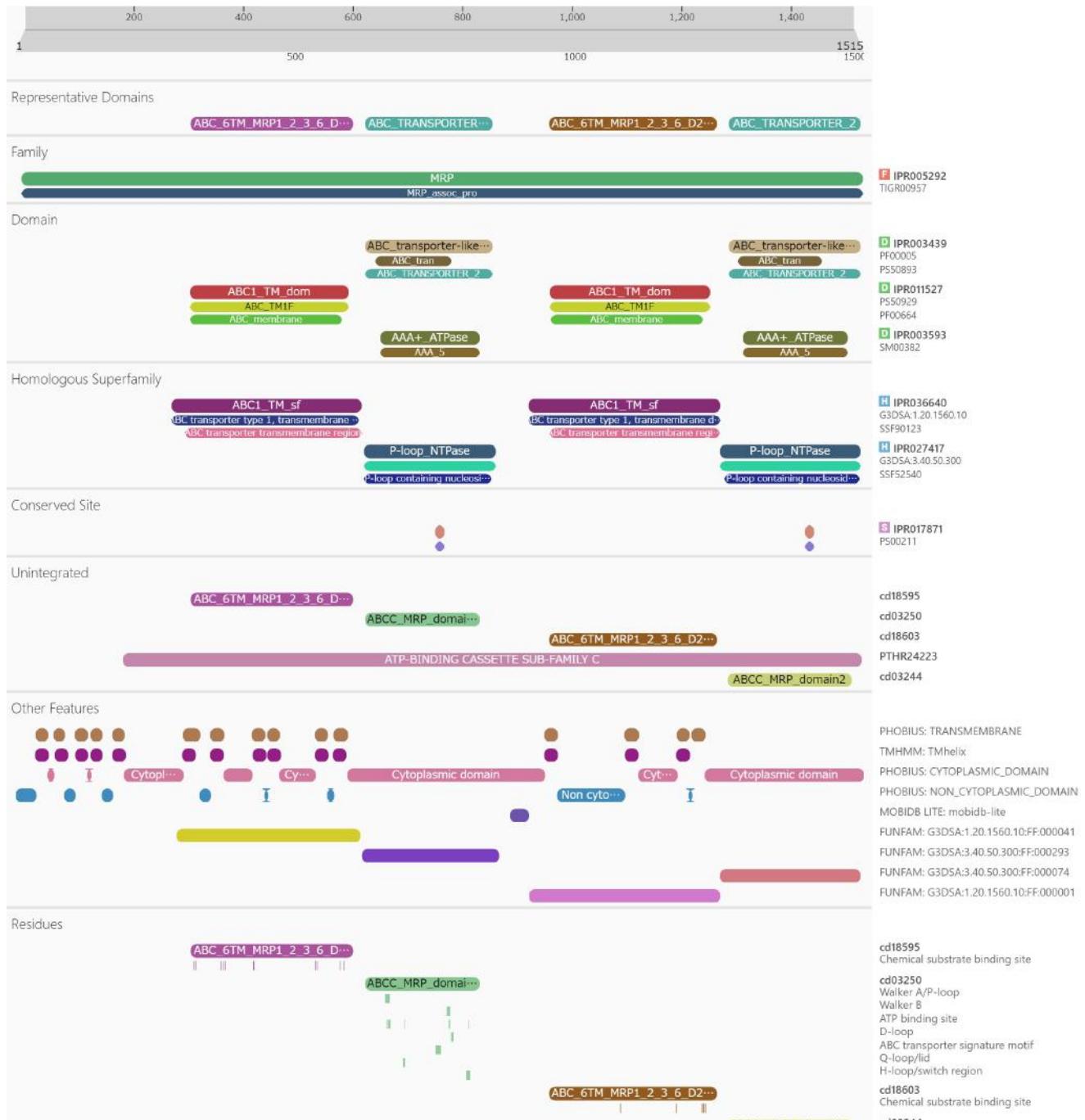
cd18573
PIRSF002773

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TMHMM: TMhelix
PHOBIUS: TRANSMEMBRANE
PHOBIUS: NON_CYTOPLASMIC_DOMAIN
FUNFAM: G3DSA:1.20.1560.10:FF:000048
FUNFAM: G3DSA:3.40.50.300:FF:000218

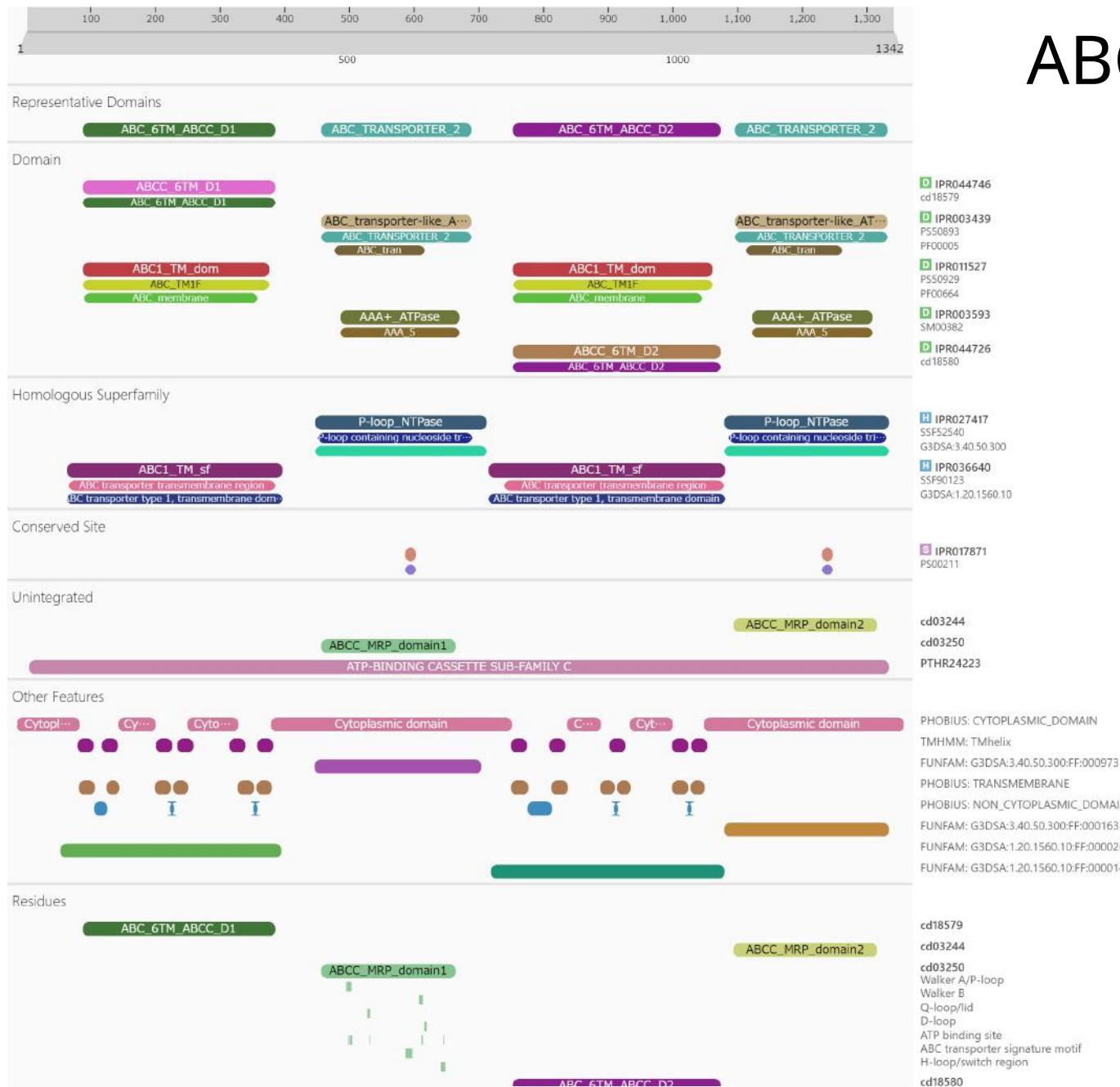
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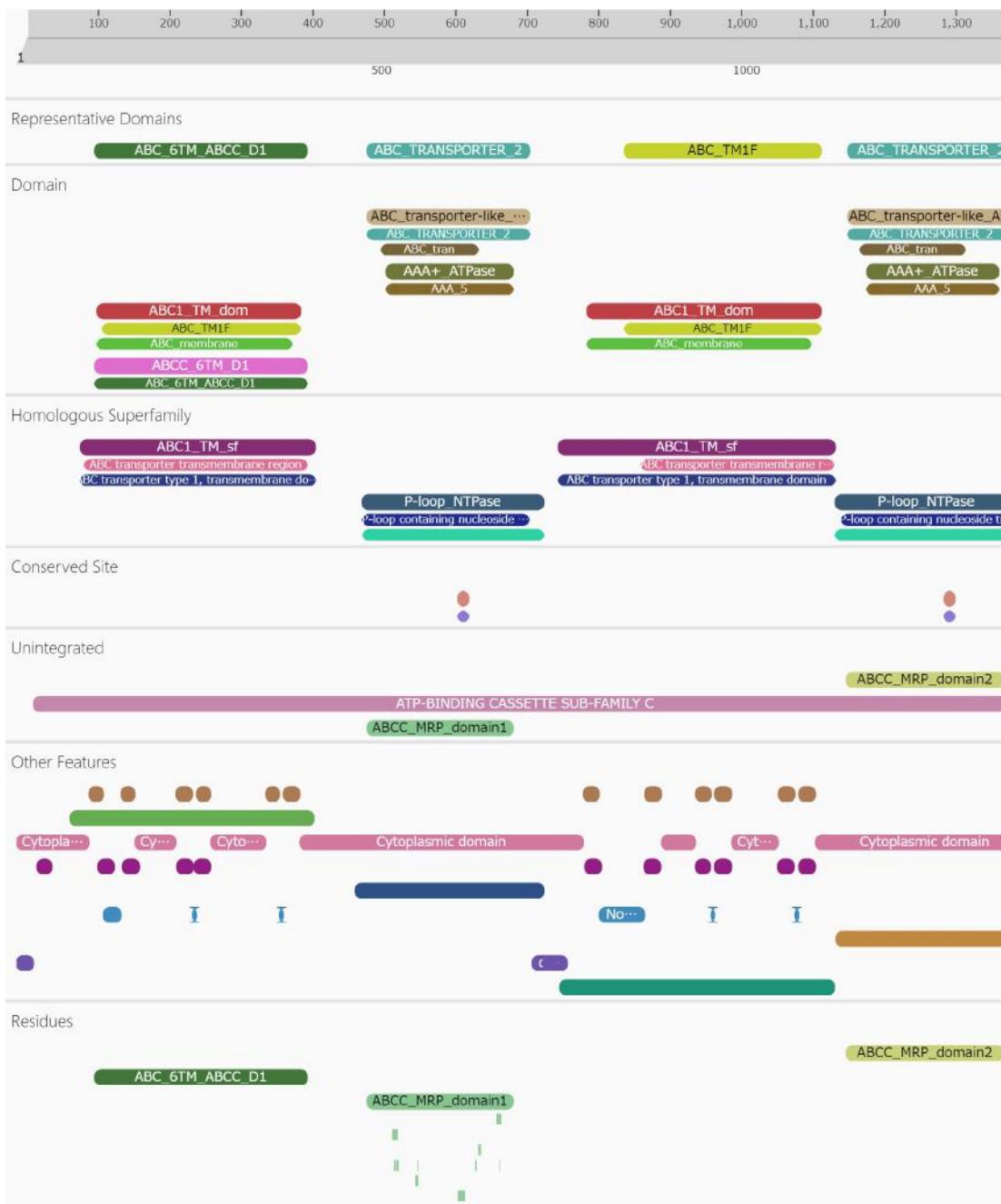
ABCC3



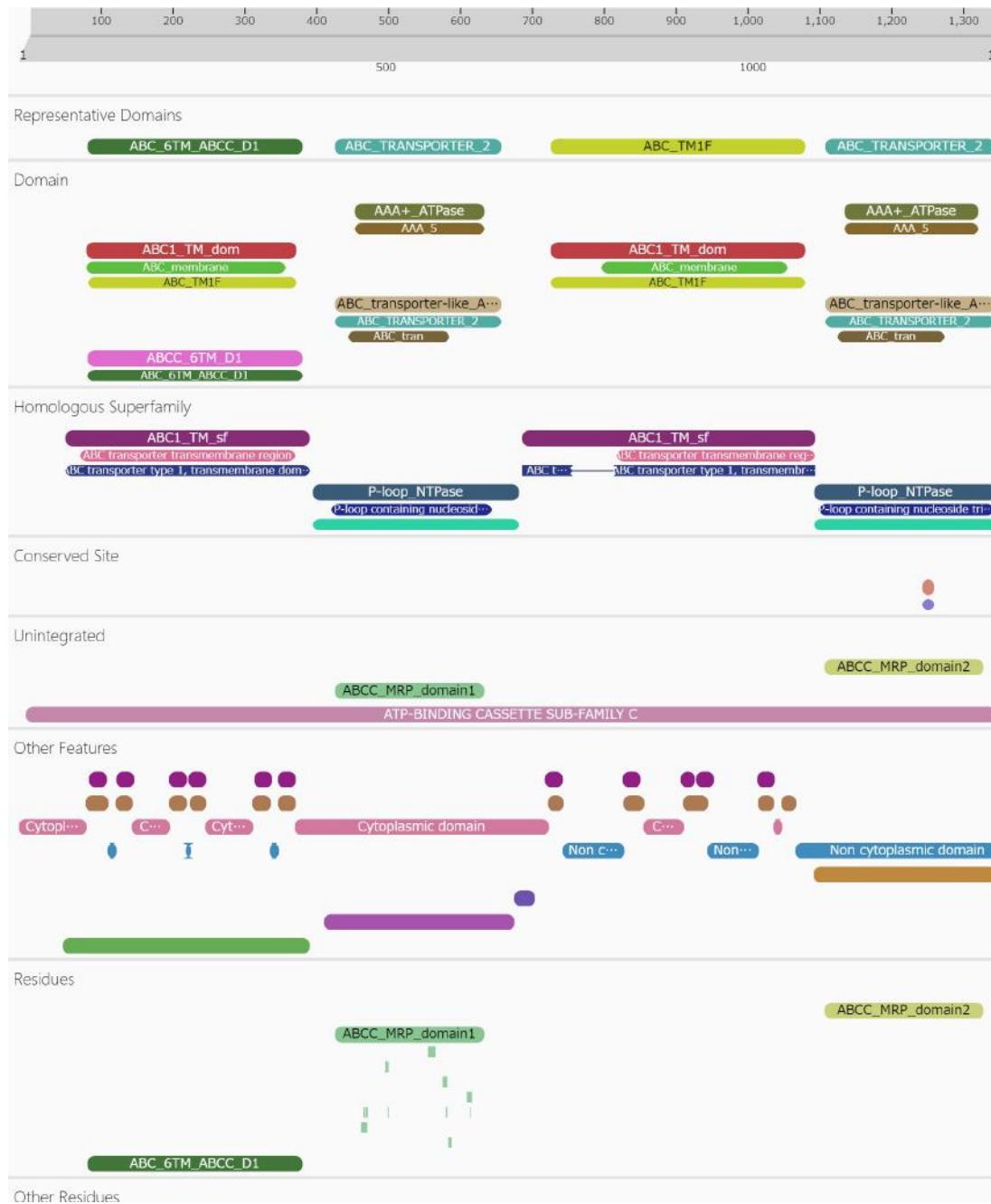
ABCC1



ABCC2



ABCC5



D IPR003593
SM00382

D IPR011527
PF00664
PS50929

D IPR003439
PS50693
PF00005

D IPR044746
cd18579

H IPR036640
SS90123
G3DSA:1.20.1560.10

H IPR027417
SSF2540
G3DSA:3.40.50.300

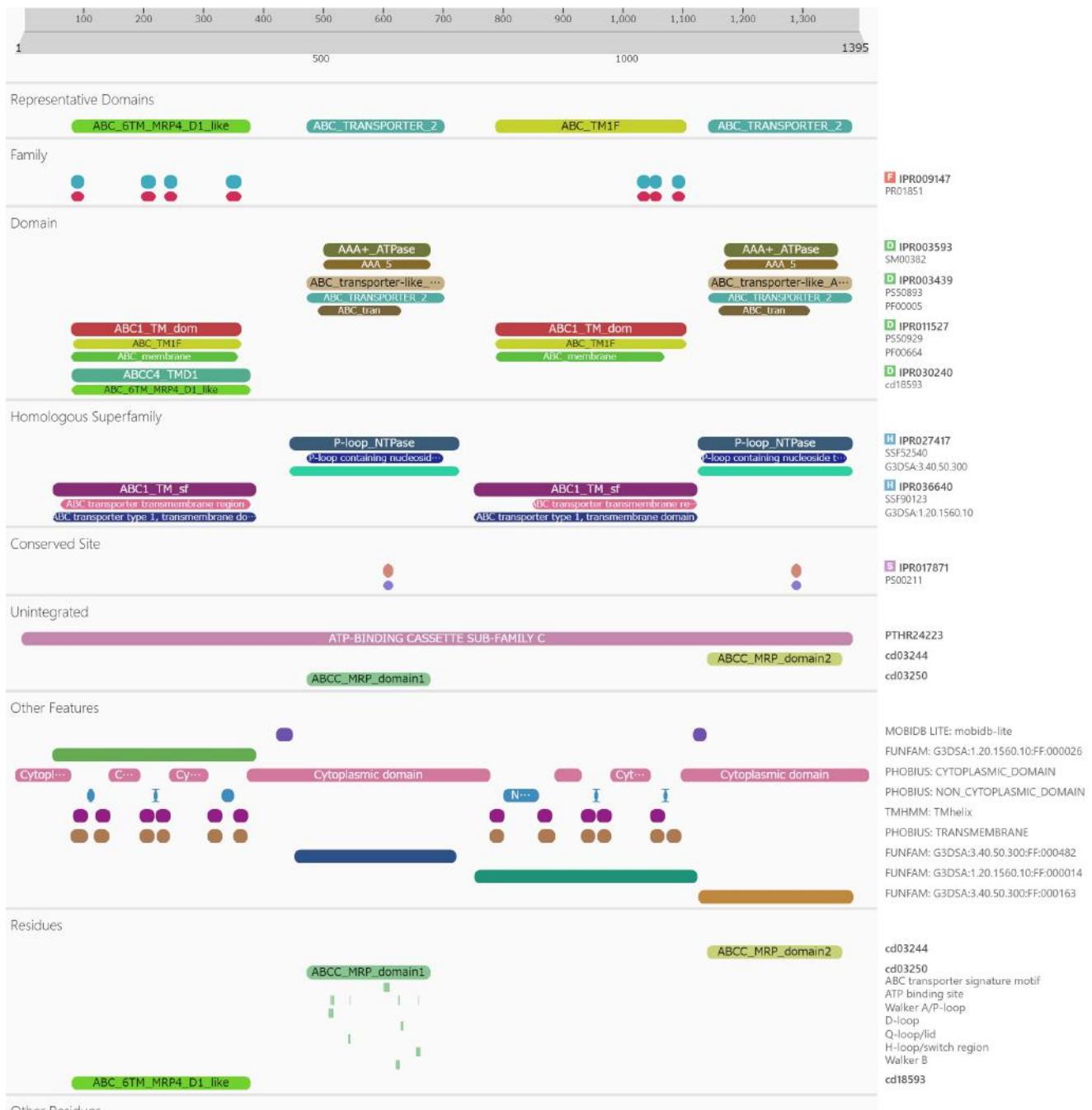
S IPR017871
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cd03244
cd03250
PTHR24223

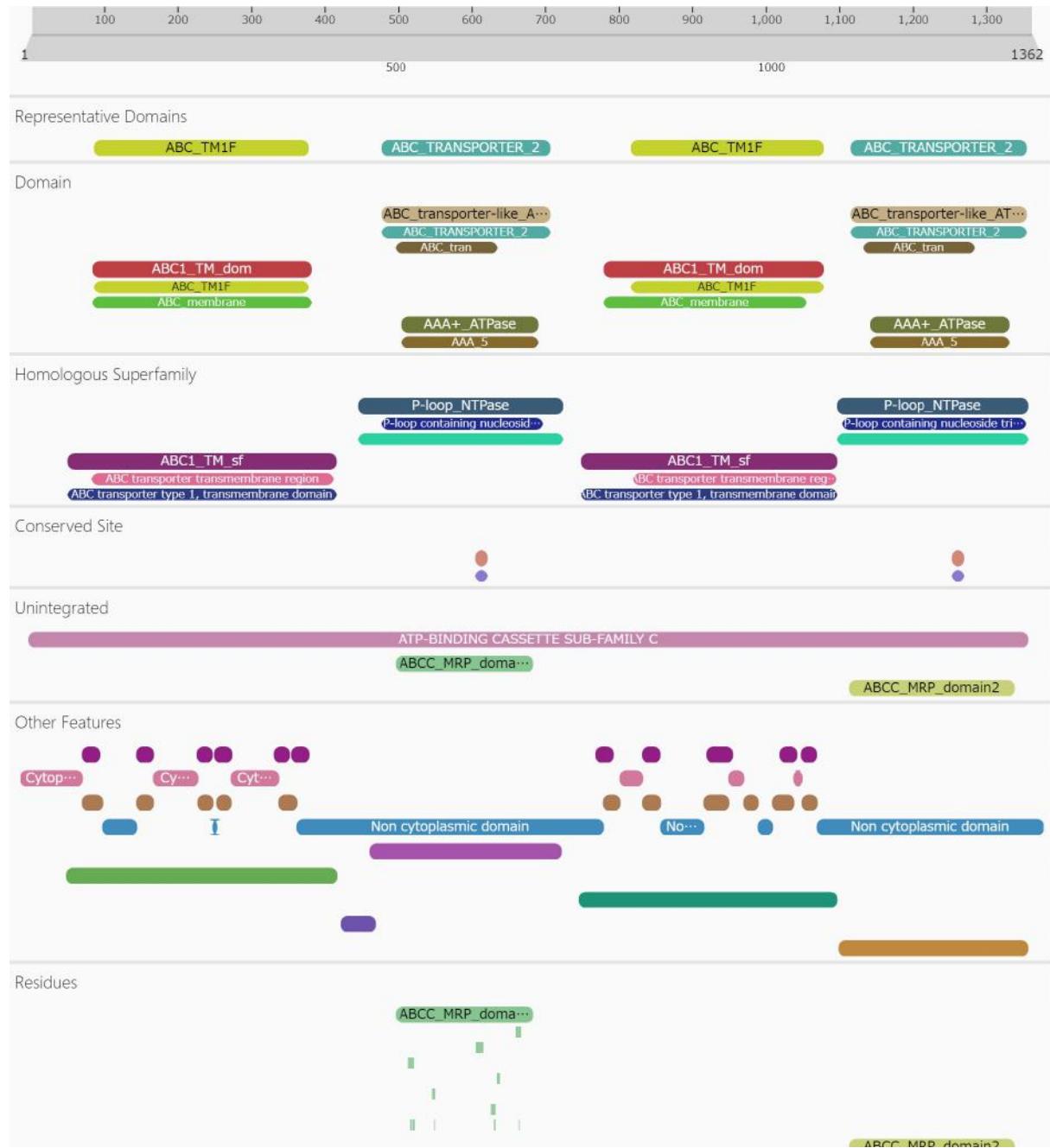
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PHOBIUS: CYTOPLASMIC_DOMAIN
PHOBIUS: NON_CYTOPLASMIC_DOMAIN
FUNFAM: G3DSA:3.40.50.300:FF:000163
MOBIDB_LITE: mobidb-lite
FUNFAM: G3DSA:3.40.50.300:FF:000973
FUNFAM: G3DSA:1.20.1560.10:FF:000026

cd03244
cd03250
ABC transporter signature motif
Q-loop/lid
Walker B
H-loop/switch region
ATP binding site
Walker A/P-loop
D-loop
cd18579

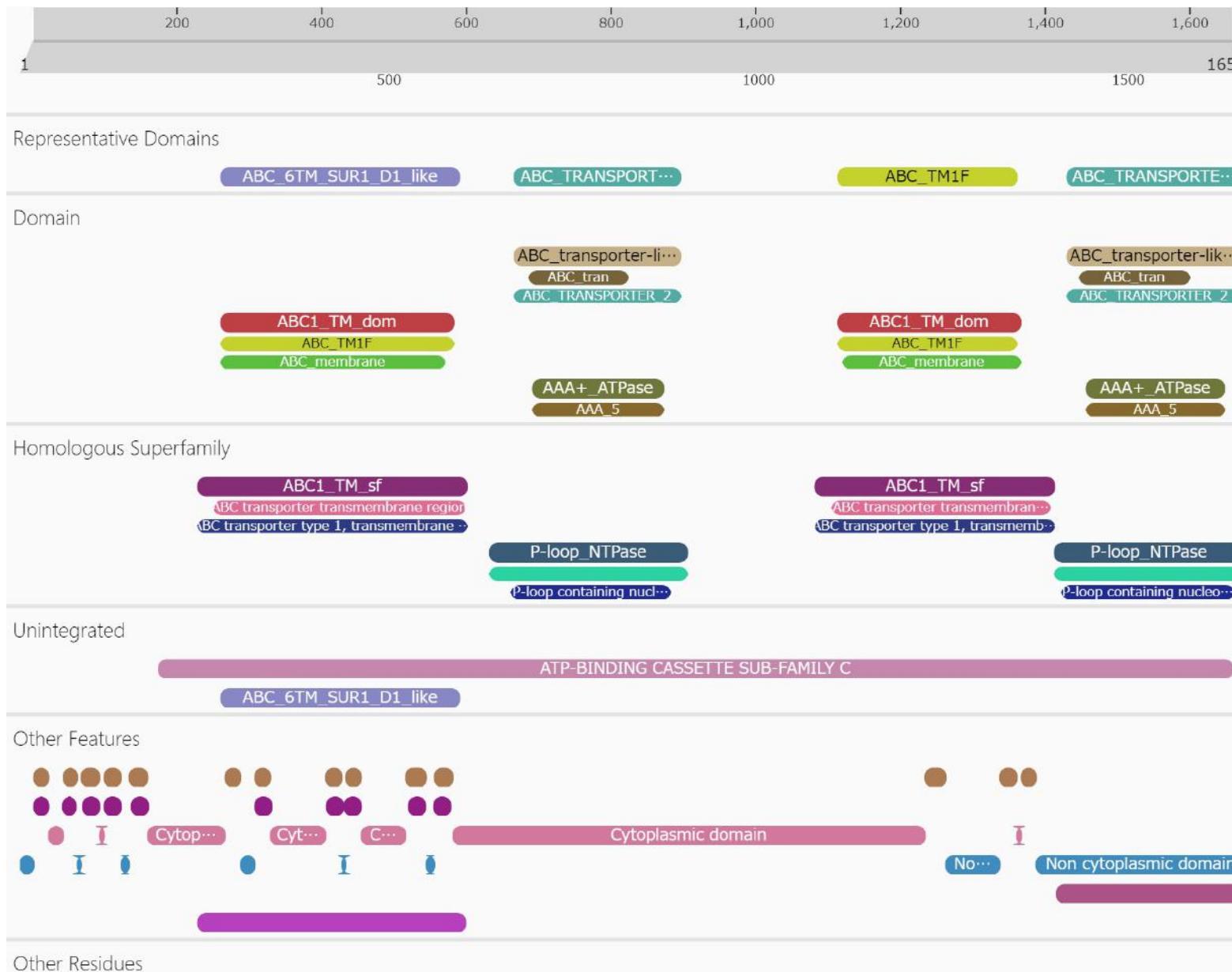
ABCC4



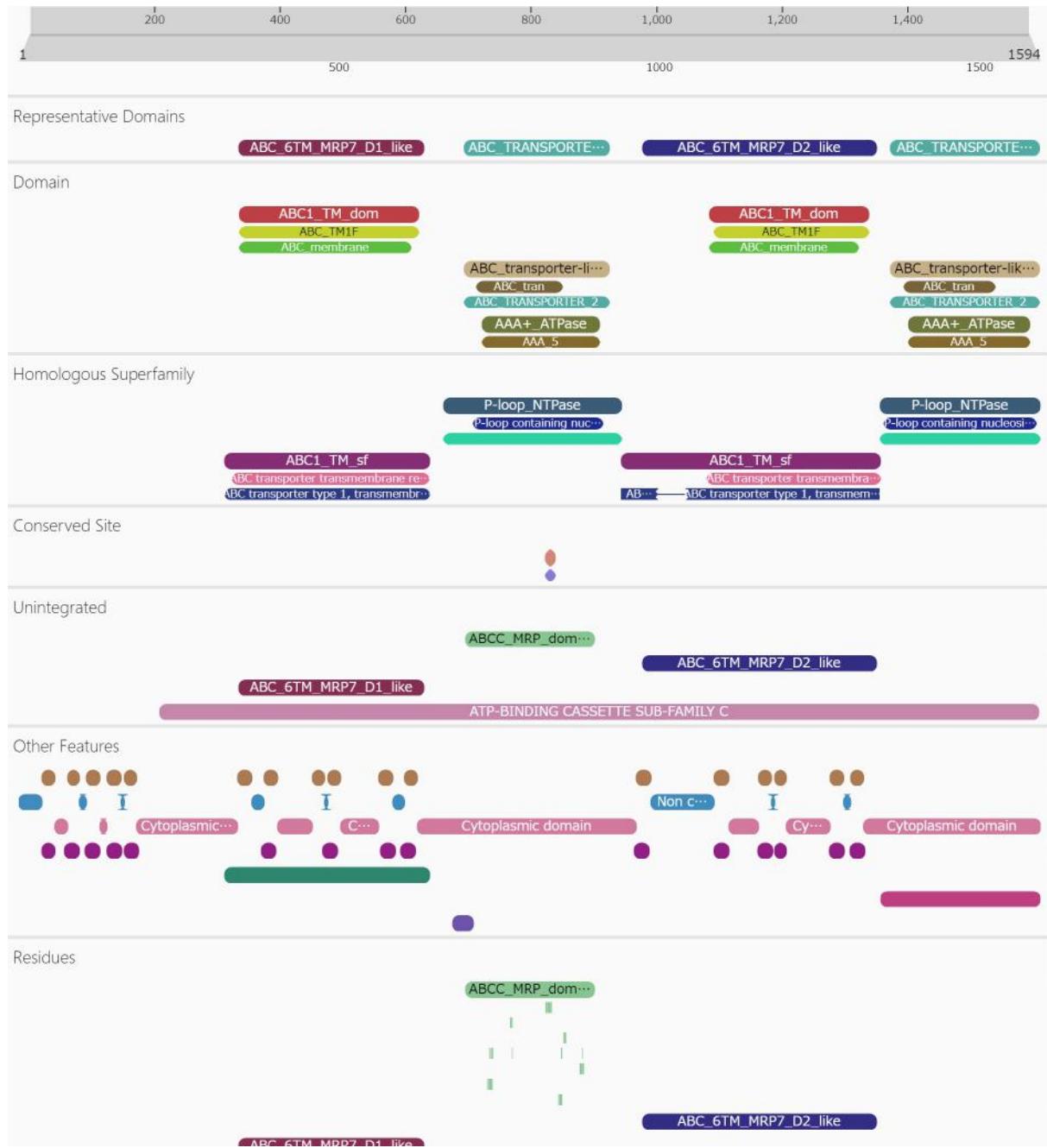
ABCC4-like1



ABCC4-like2



ABCC9



D IPR011527
PS50929
PF00664

D IPR003439
PF00005
PS50893

D IPR003593
SM00382

H IPR027417
SS52540
G3DSA:3.40.50.300

H IPR036640
SS90123
G3DSA:1.20.1560.10

S IPR017871
PS00211

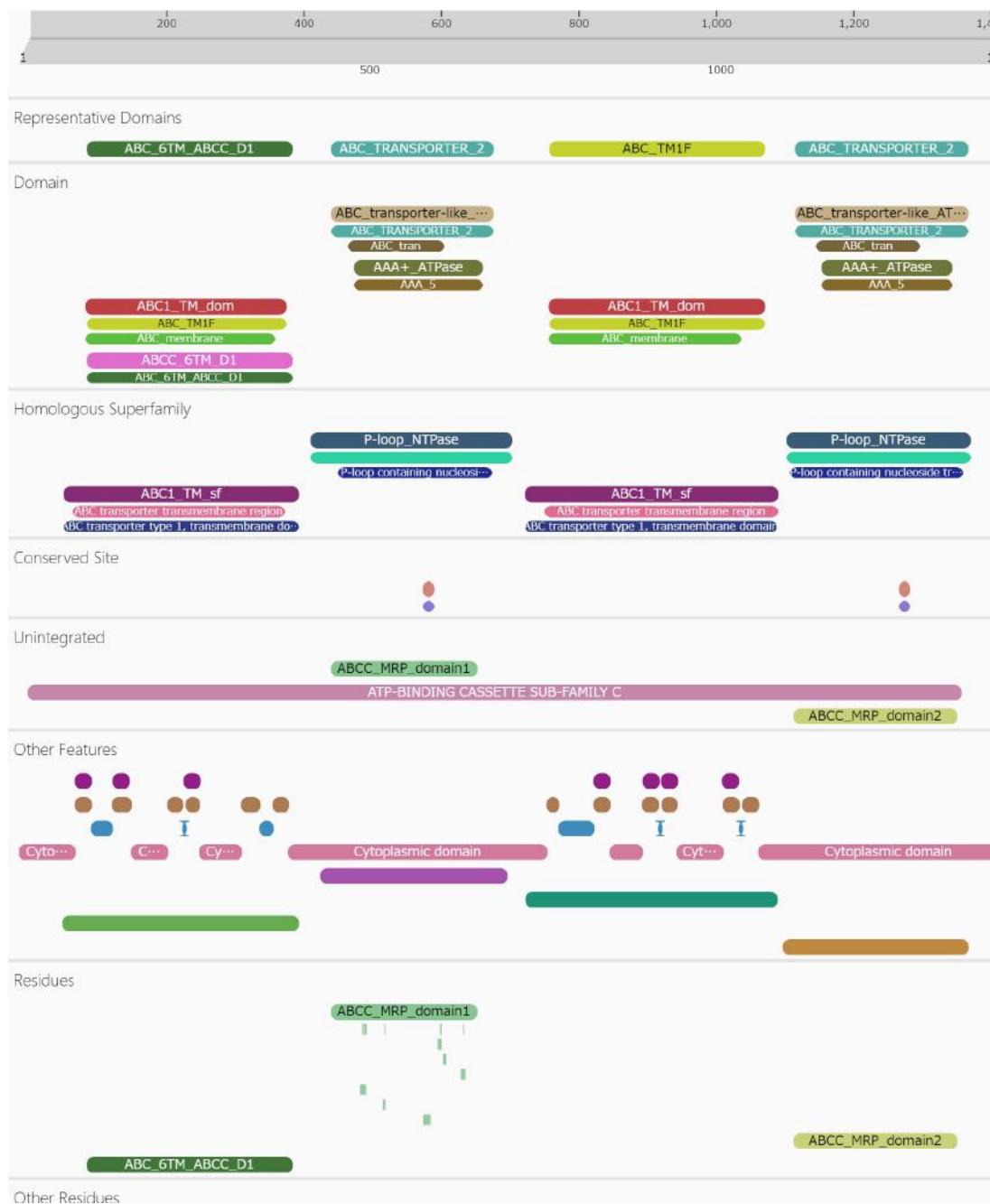
cd03250
cd18605
cd18598
PTHR24223

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PHOBIUS: NON_CYTOPLASMIC_DOMAIN
PHOBIUS: CYTOPLASMIC_DOMAIN
TMHMM: TMhelix
FUNFAM: G3DSA:1.20.1560.10:FF:000037
FUNFAM: G3DSA:3.40.50.300:FF:000630
MOBIDB LITE: mobidb-lite

cd03250
ABC transporter signature motif
Q-loop/lid
D-loop
ATP binding site
H-loop/switch region
Walker A/P-loop
Walker B

cd18605
cd18598

ABCC10



D IPR003439
PS50693
PF00005

D IPR003593
SM00382

D IPR011527
PS50929
PF00664

D IPR044746
cd18579

H IPR027417
G3DSA:3.40.50.300
SSF52540

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SSF90123
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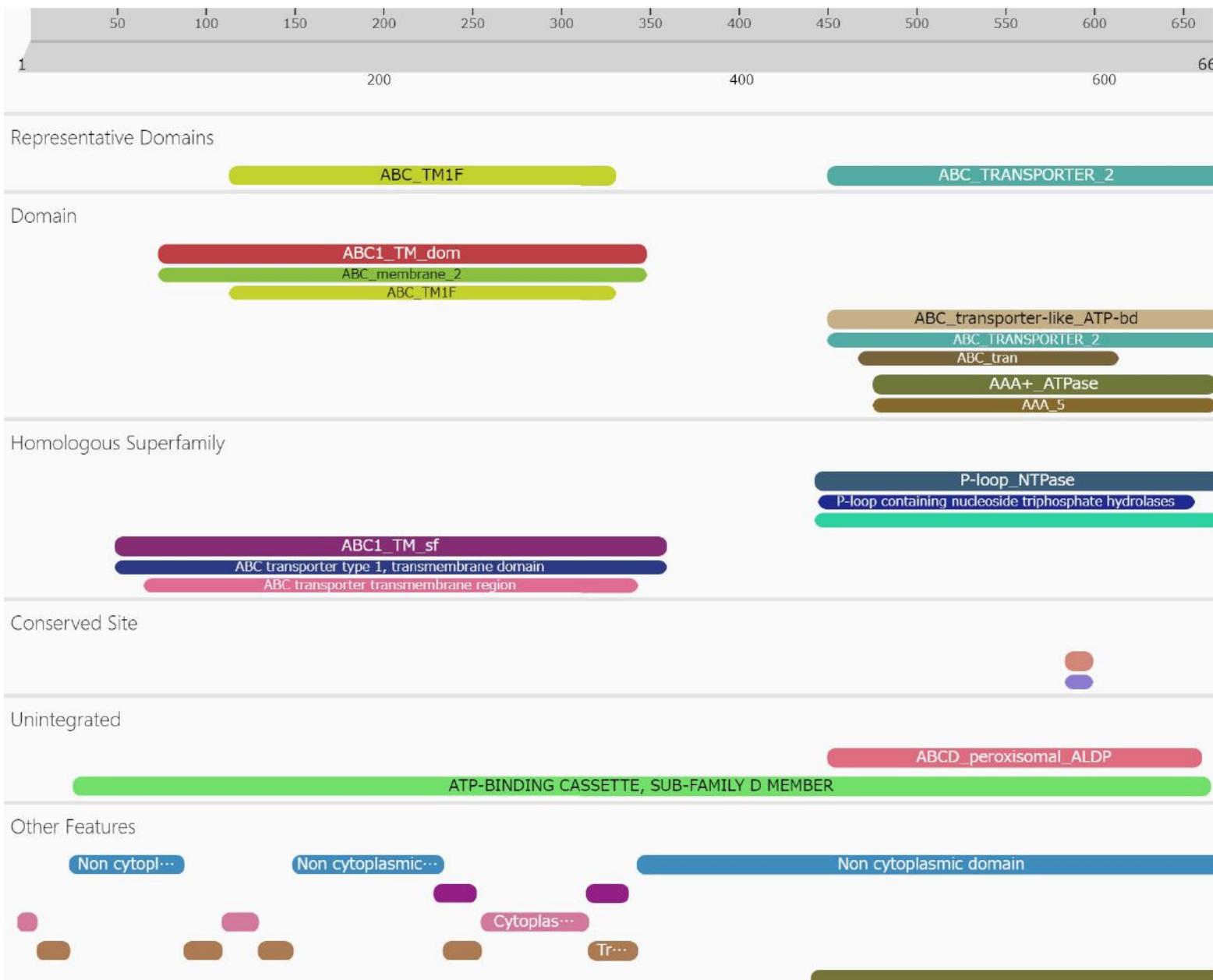
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PS00211

cd03250
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cd03244

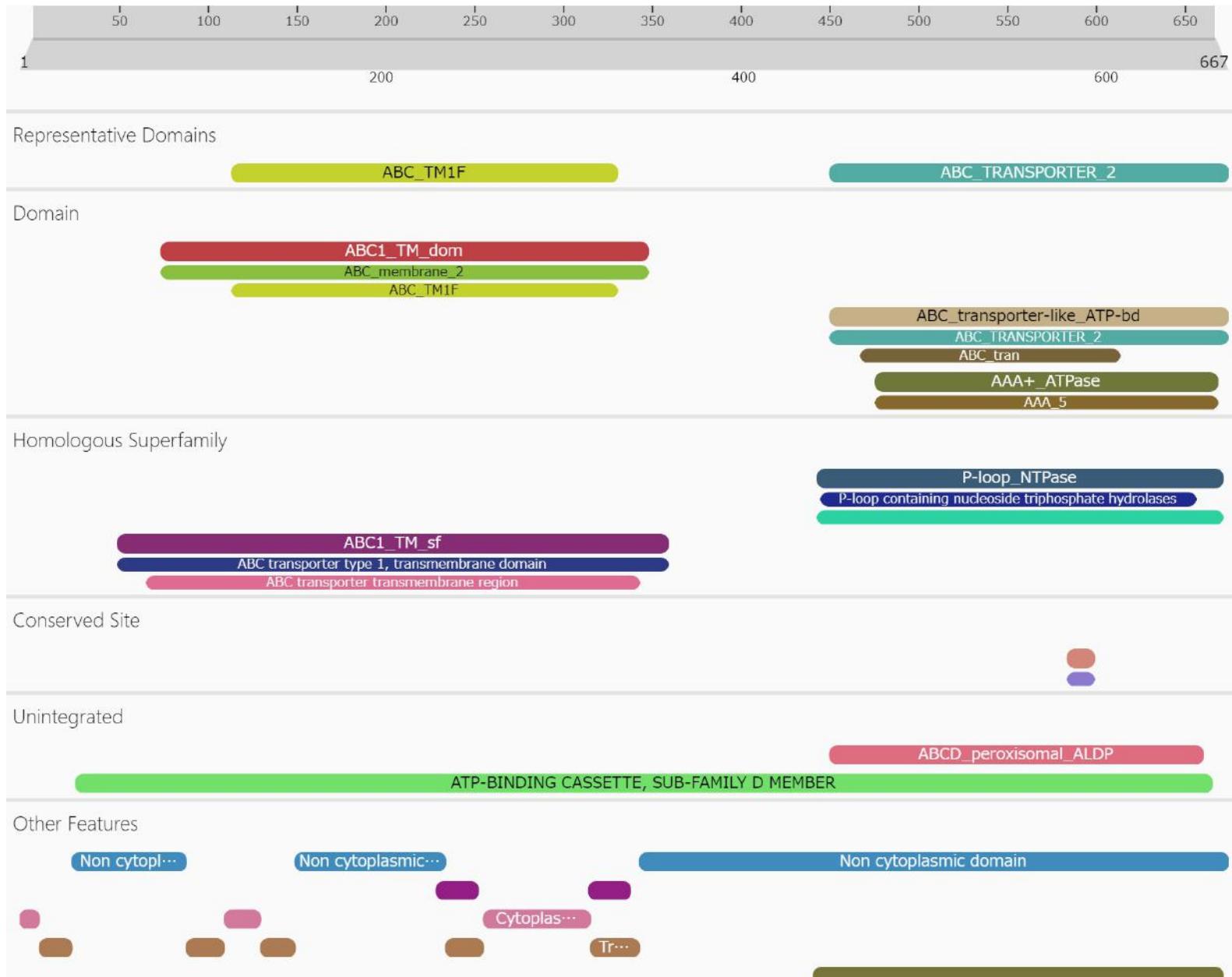
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PHOBIUS: NON_CYTOPLASMIC_DOMAIN
PHOBIUS: CYTOPLASMIC_DOMAIN
FUNFAM: G3DSA:3.40.50.300:FF:000973
FUNFAM: G3DSA:1.20.1560.10:FF:000014
FUNFAM: G3DSA:1.20.1560.10:FF:000026
FUNFAM: G3DSA:3.40.50.300:FF:000163

cd03250
ATP binding site
Walker B
D-loop
H-loop/switch region
Walker A/P-loop
Q-loop/fld
ABC transporter signature motif
cd03244
cd18579

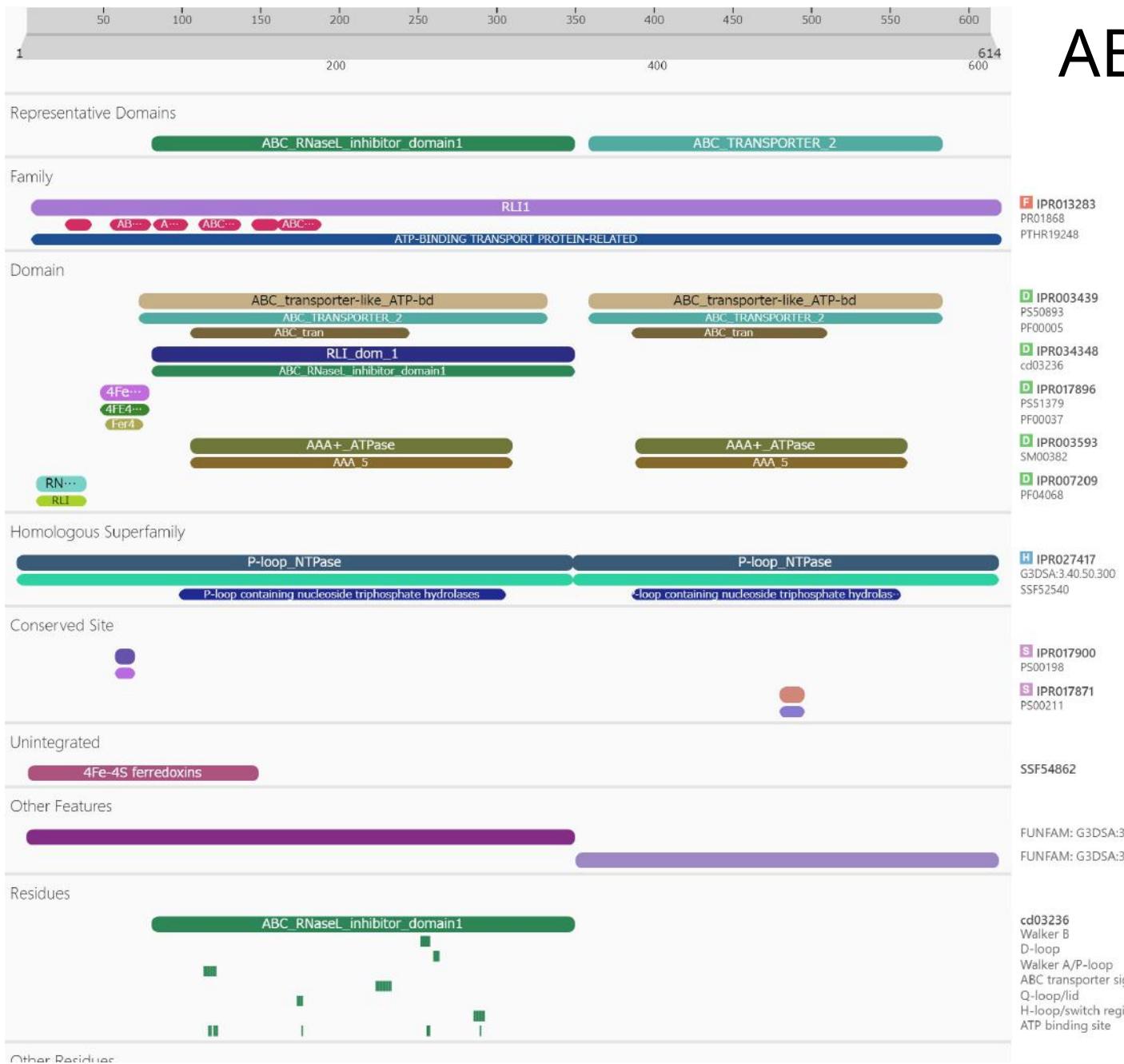
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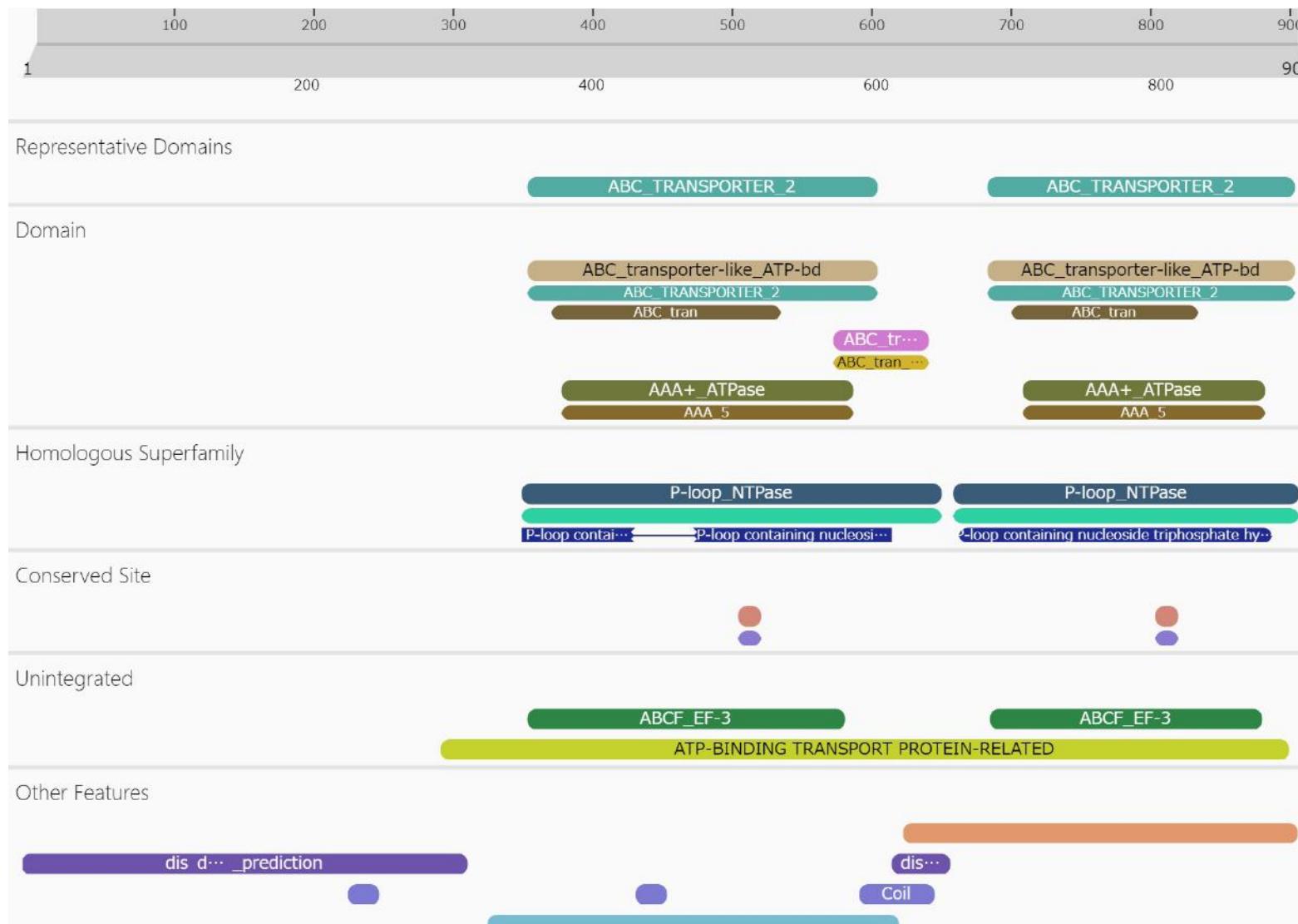
ABCD1



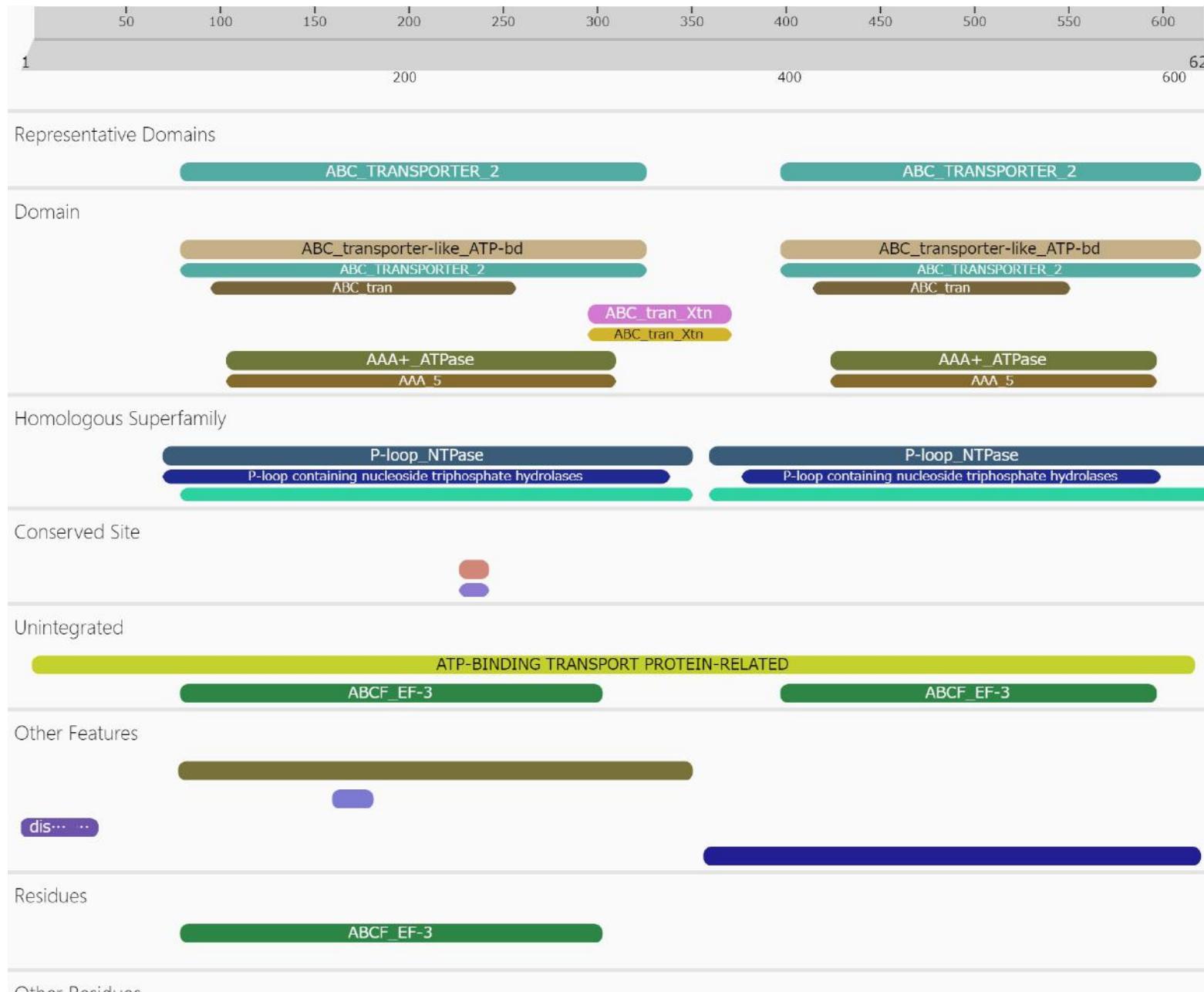
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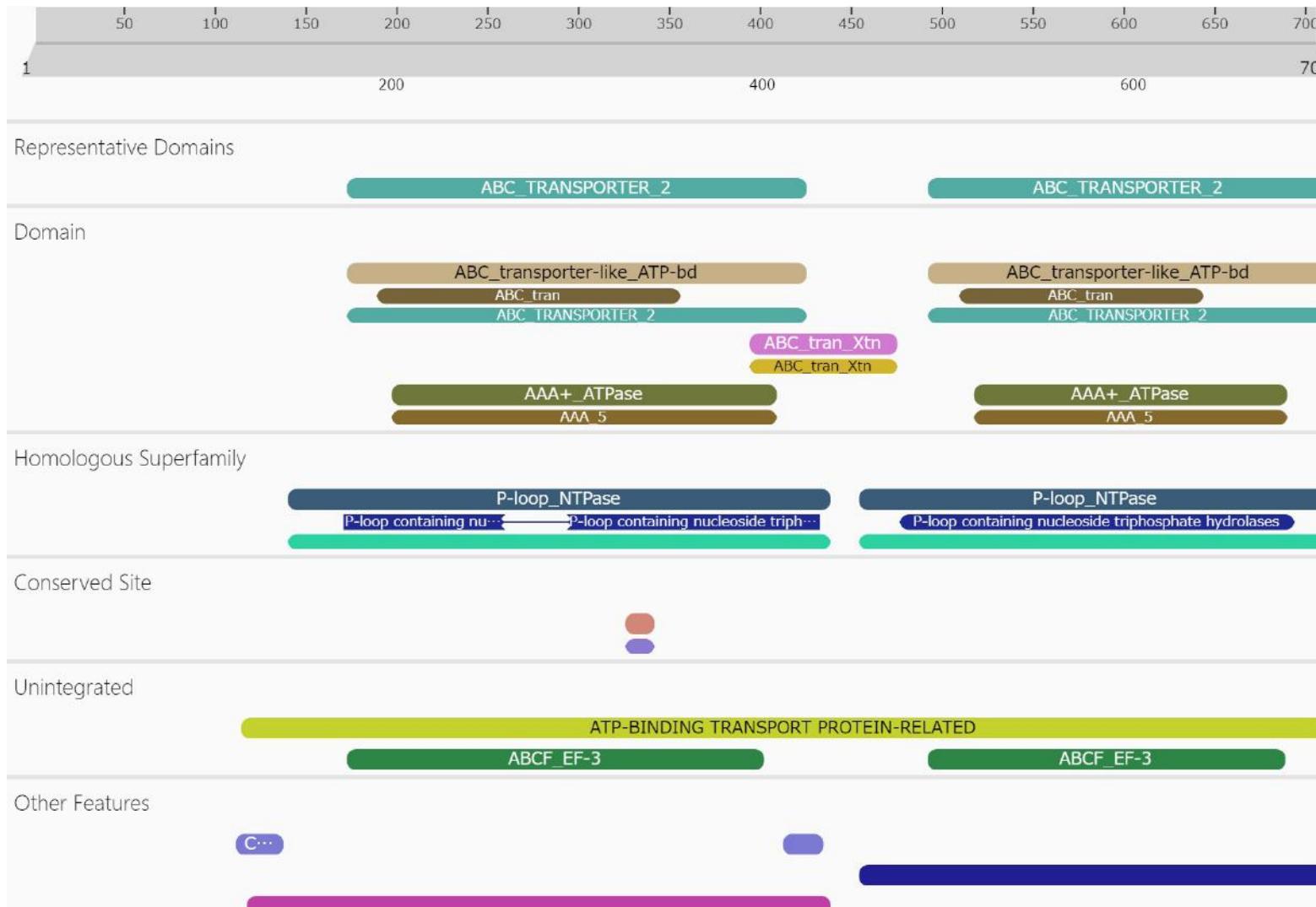
ABCE1

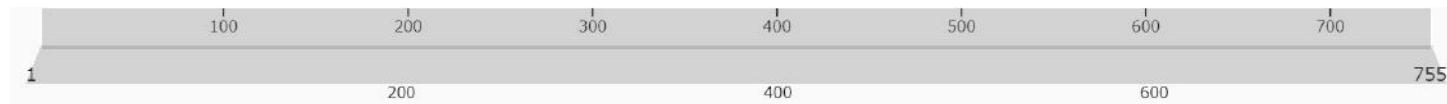


ABCF1



ABCF2





Representative Domains

ABCF3

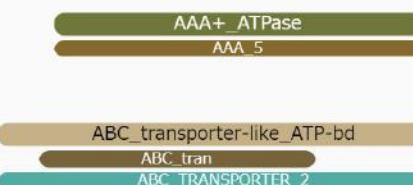
PS50893

D IPR003593
SM00382

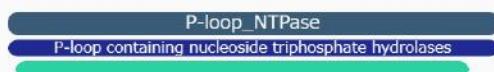
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PF01061

D IPR003439
PF00005
PS50893

Domain



Homologous Superfamily



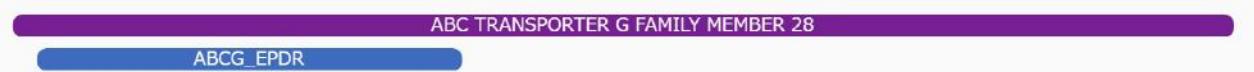
H IPR027417
SSF52540
G3DSA:3.40.50.300

Conserved Site



S IPR017871
PS00211

Unintegrated



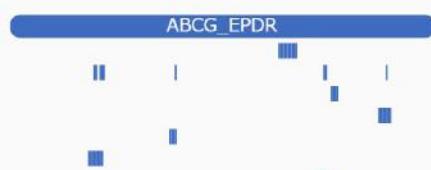
PTHR48041
cd03213

Other Features



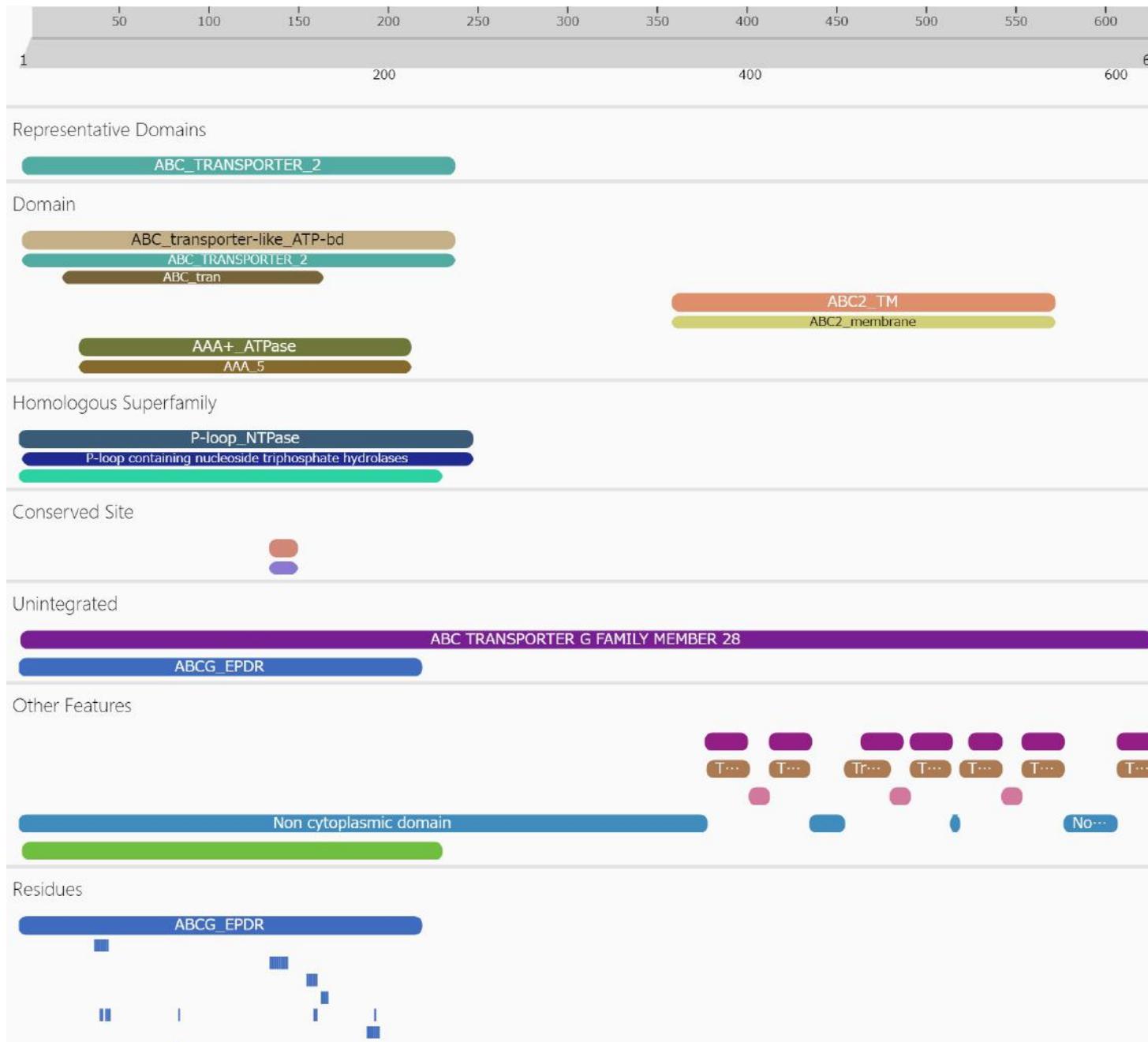
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TMHMM: TMhelix
FUNFAM: G3DSA:3.40.50.300:FF:000891
PHOBIUS: TRANSMEMBRANE
MOBIDB LITE: mobidb-lite
PHOBIUS: CYTOPLASMIC_DOMAIN

Residues



cd03213
ABC transporter signature motif
ATP binding site
D-loop
H-loop/switch region
Q-loop/lid
Walker A/P-loop
Walker B

ABCG1



PS50893

D IPR003439
PS50893
PF00005

D IPR013525
PF01061

D IPR003593
SM00382

H IPR027417
SSF52540
G3DSA:3.40.50.300

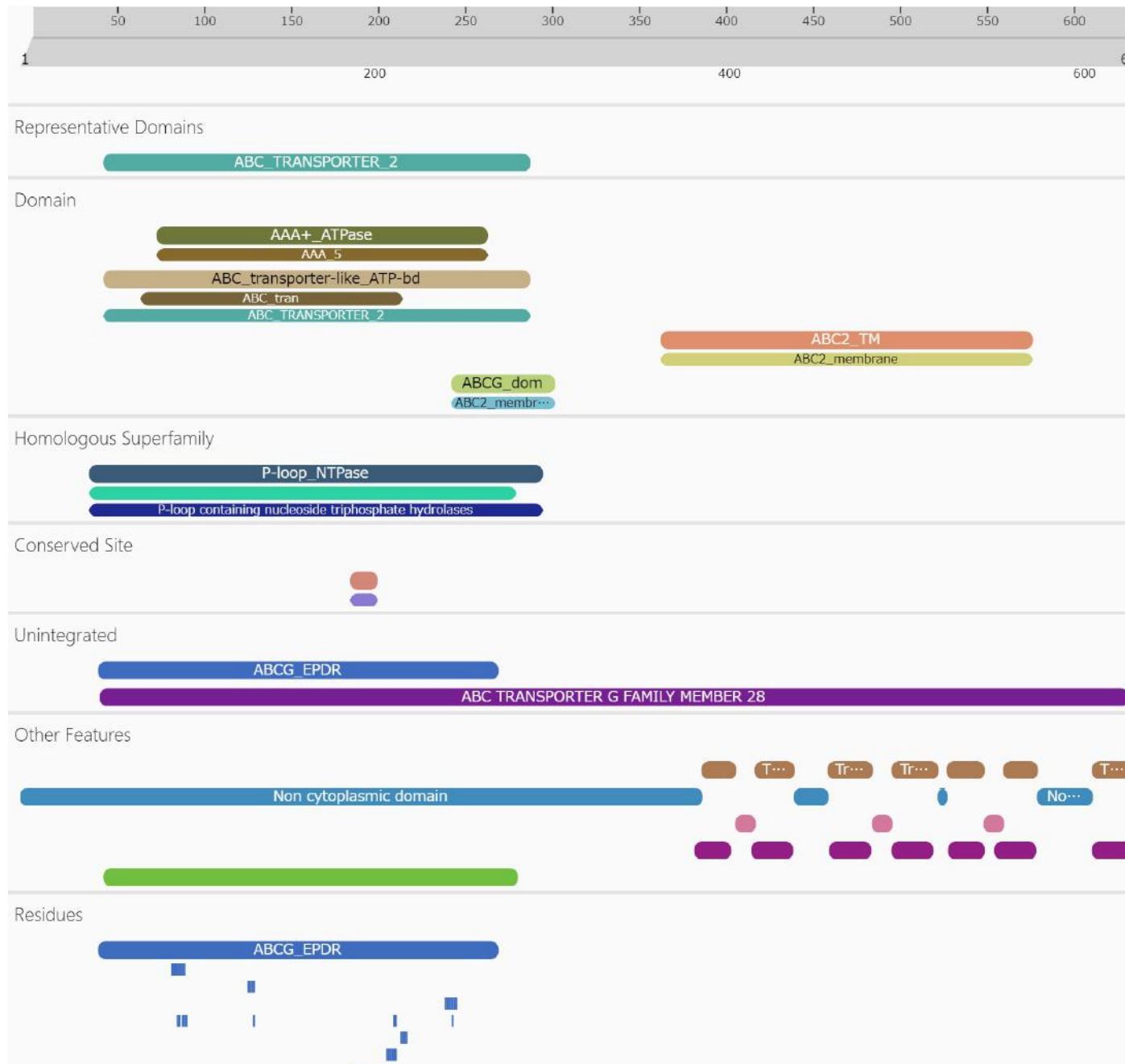
S IPR017871
PS00211

PTHR48041
cd03213

TMHMM: TMhelix
PHOBIUS: TRANSMEMBRANE
PHOBIUS: CYTOPLASMIC_DOMAIN
PHOBIUS: NON_CYTOPLASMIC_DOMAIN
FUNFAM: G3DSA:3.40.50.300:FF:001077

cd03213
Walker A/P-loop
ABC transporter signature motif
Walker B
D-loop
ATP binding site
H-loop/switch region
O-loop/lid

ABCG2



PS50893

D IPR003593
SM00382

D IPR003439
PF00005
PS50893

D IPR013525
PF01061

D IPR043926
PF19055

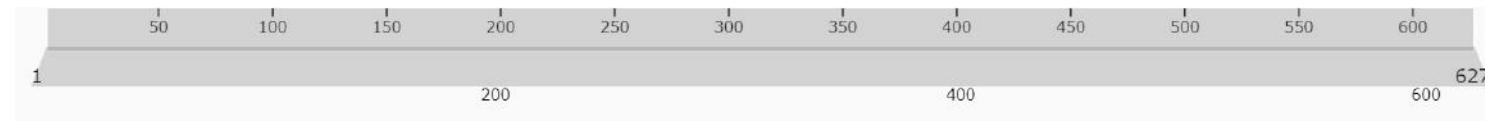
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G3DSA:3.40.50.300
SSF52540

S IPR017871
PS00211

cd03213
PTHR48041

PHOBIUS: TRANSMEMBRANE
PHOBIUS: NON_CYTOPLASMIC_DOMAIN
PHOBIUS: CYTOPLASMIC_DOMAIN
TMHMM: TMhelix
FUNFAM: G3DSA:3.40.50.300:FF:001077

cd03213
Walker A/P-loop
Q-loop/lid
H-loop/switch region
ATP binding site
D-loop
Walker B
ABC transporter signature motif



ABCG3

Representative Domains

ABC_TRANSPORTER_2

Domain



ABC2_TM ABC2_membrane

PS50893

D IPR003439

PF00005

PS50893

D IPR003593

SM00382

D IPR013525

PF01061

Homologous Superfamily



H IPR027417

SSF52540

G3DSA:3.40.50.300

Conserved Site



S IPR017871

PS00211

Unintegrated



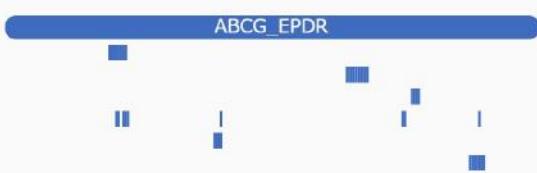
PTHR48041

cd03213

Other Features



Residues



cd03213

Walker A/P-loop

ABC transporter signature motif

D-loop

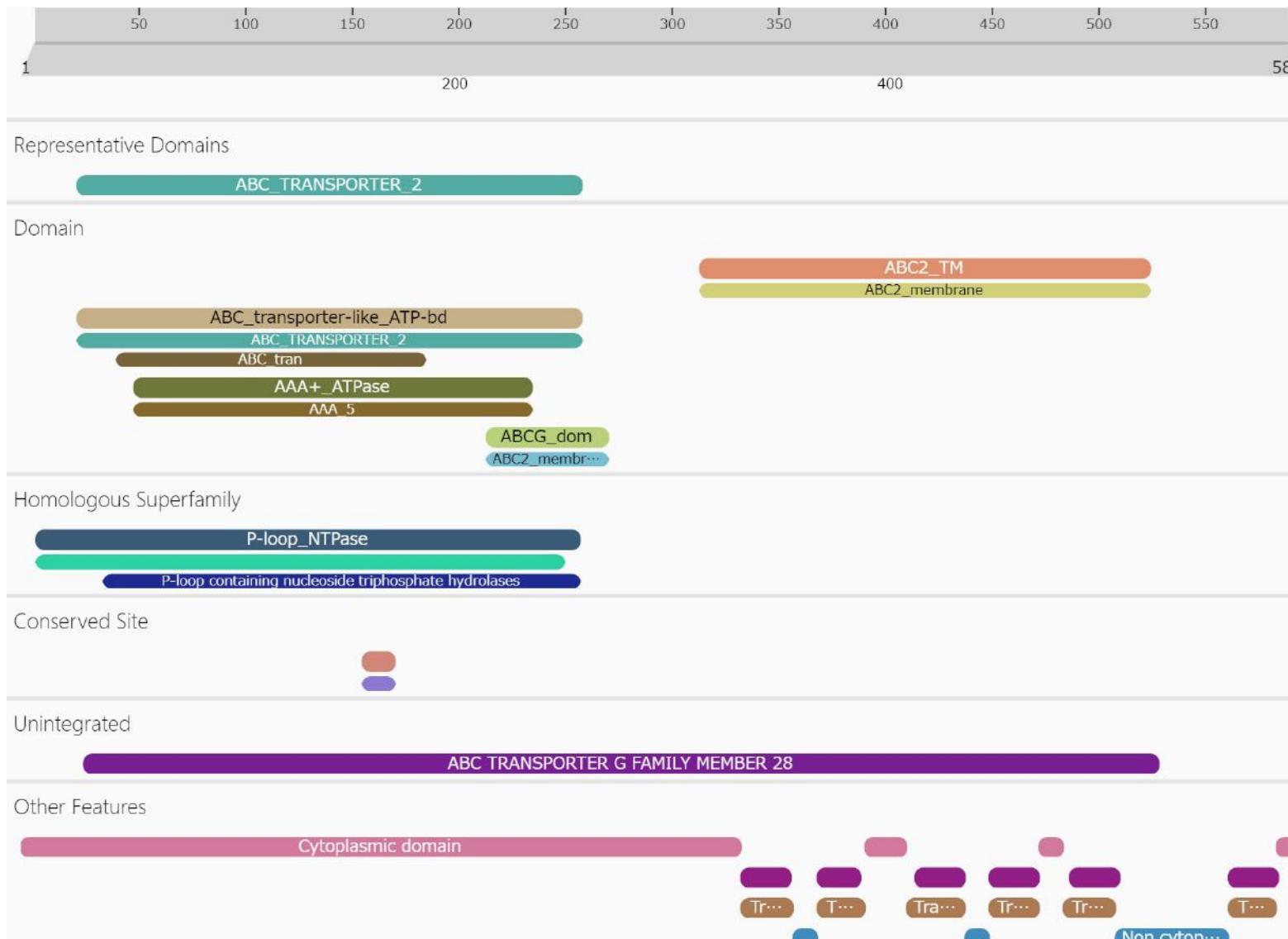
ATP binding site

Q-loop/lid

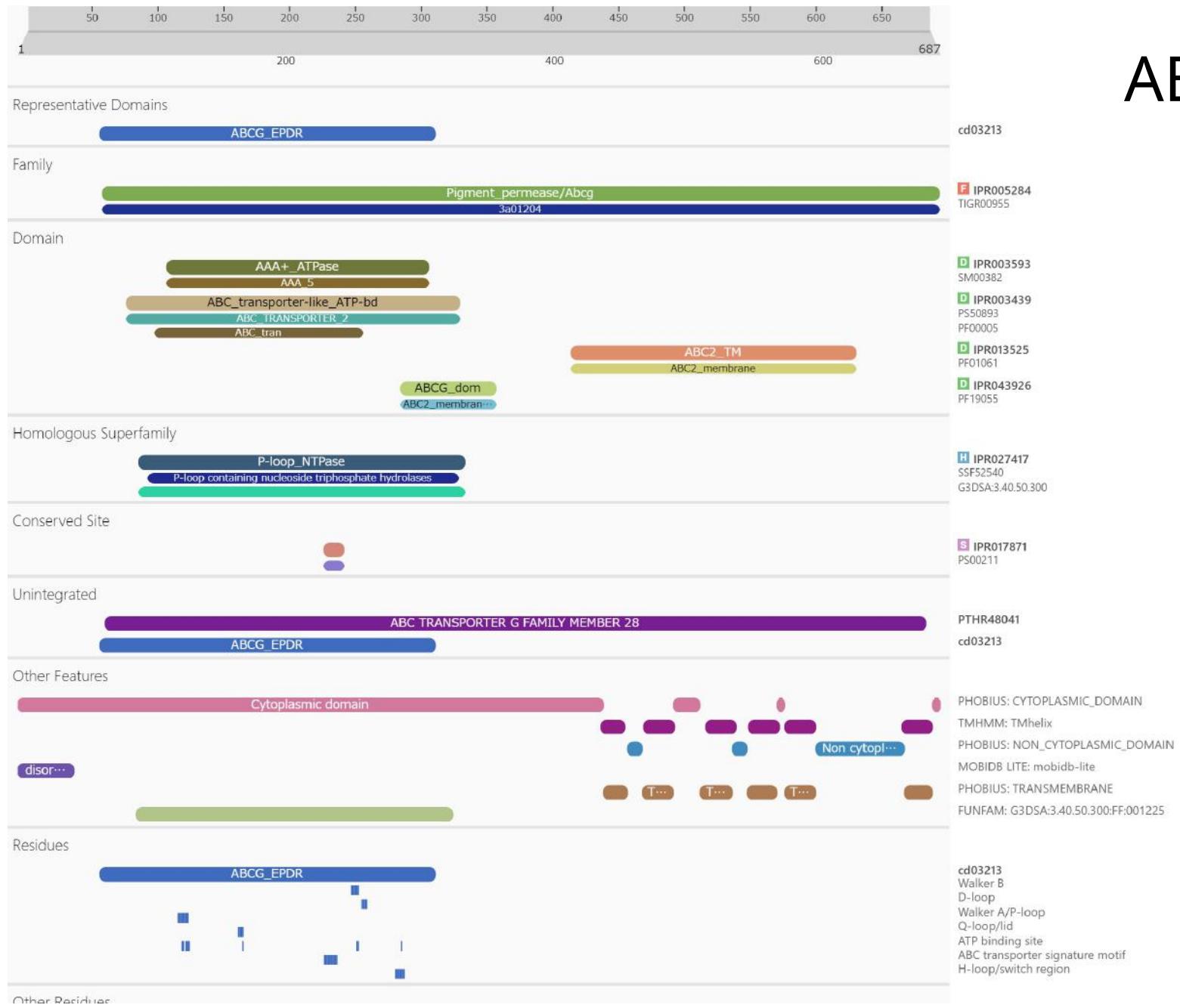
H-loop/switch region

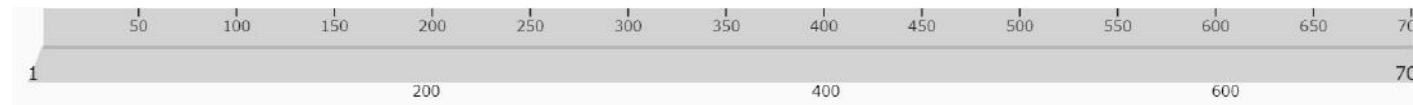
Walker B

ABCG4



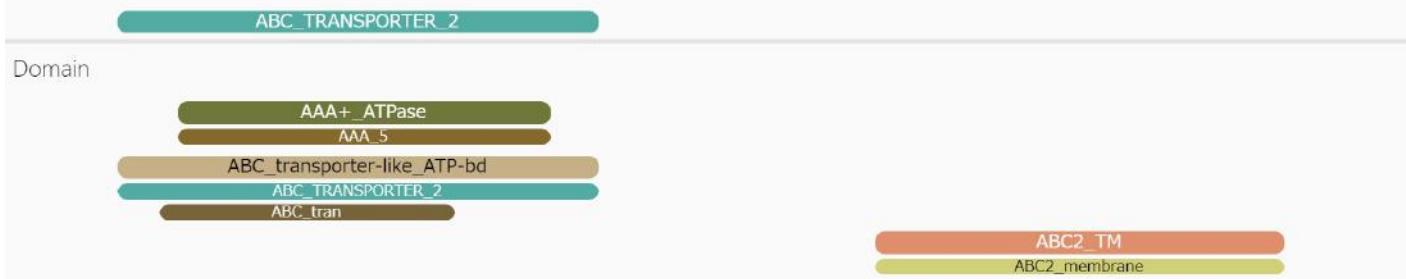
ABCG5





ABCG6

Representative Domains



PS50893

D IPR003593
SM00382

D IPR003439
PS50893
PF00005

D IPR013525
PF01061

Homologous Superfamily



H IPR027417
G3DSA:3.40.50.300
SSF52540

Conserved Site



S IPR017871
PS00211

Unintegrated



cd03213
PTHR48041

Other Features



PHOBIUS: TRANSMEMBRANE
PHOBIUS: NON_CYTOPLASMIC_DOMAIN
TMHMM: TMhelix
PHOBIUS: CYTOPLASMIC_DOMAIN
FUNFAM: G3DSA:3.40.50.300:FF:000891

Residues



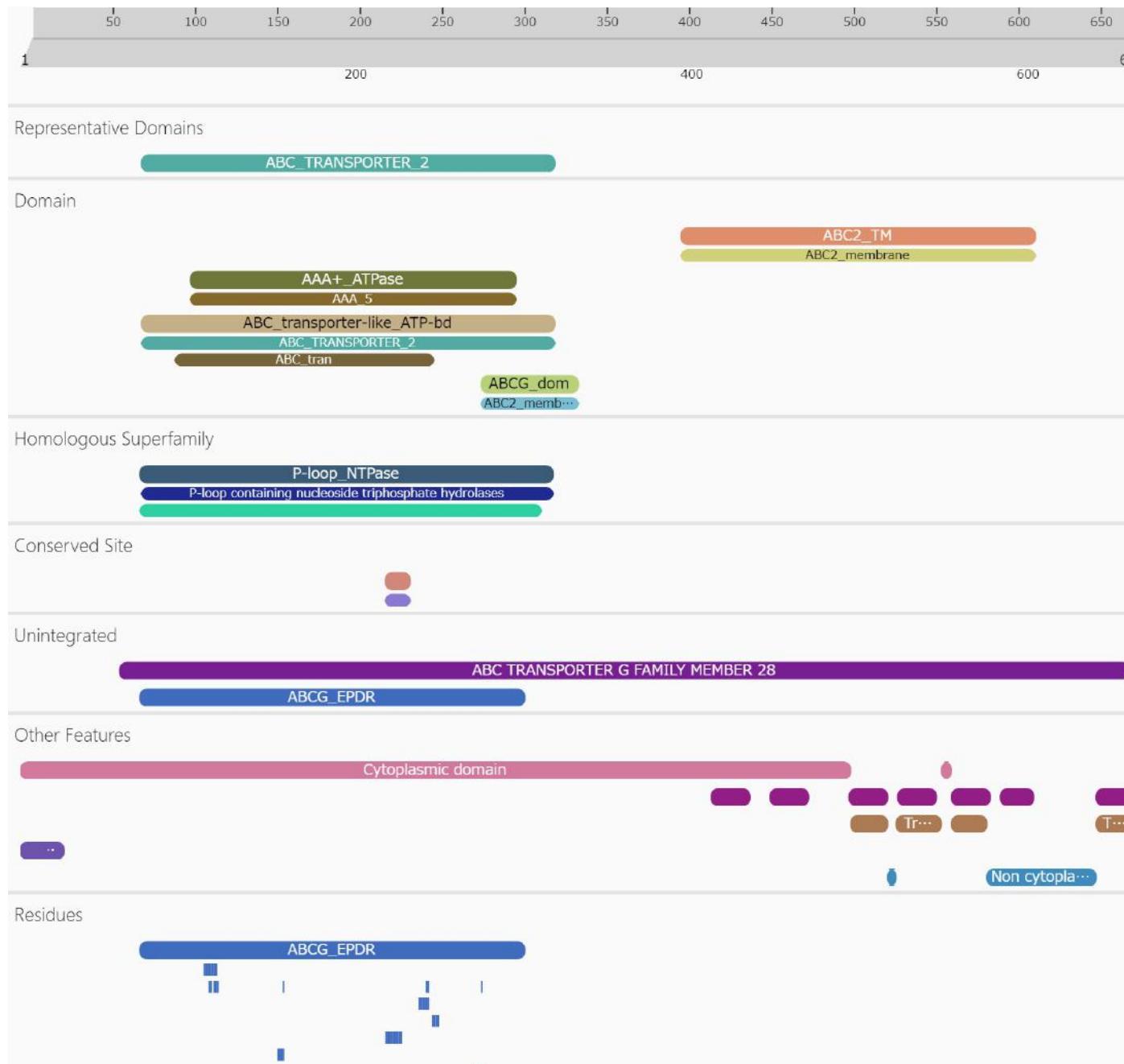
cd03213
Walker B
Walker A/P-loop
D-loop
ABC transporter signature motif
Q-loop/lid
H-loop/switch region
ATP binding site

Other Residues

ABCG7



ABCG8



PS50893

- D IPR013525
PF01061
- D IPR003593
SM00382
- D IPR003439
PS50893
PF00005
- D IPR043926
PF19055

H IPR027417
SSF52540
G3DSA:3.40.50.300

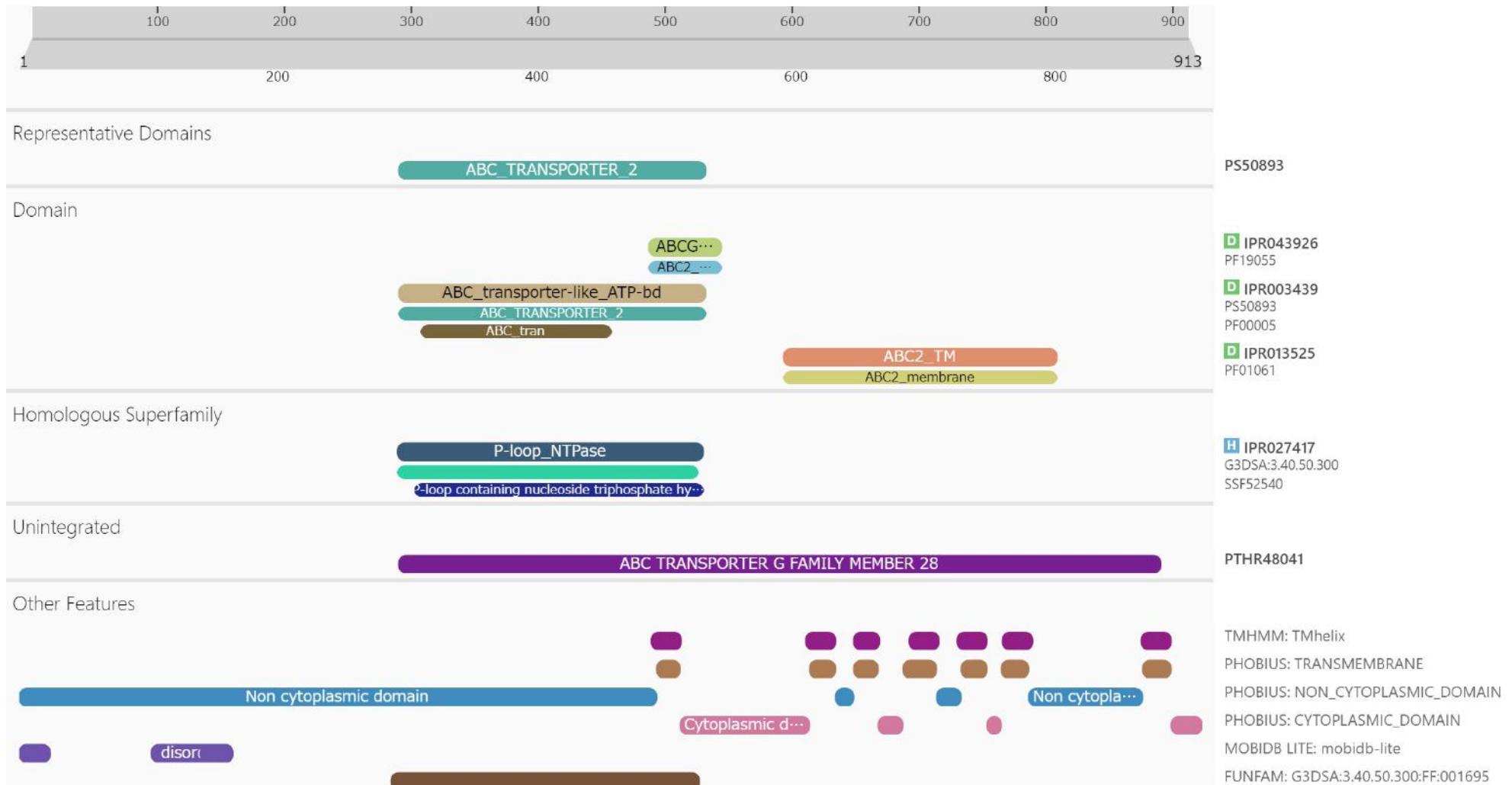
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PS00211

PTHR48041
cd03213

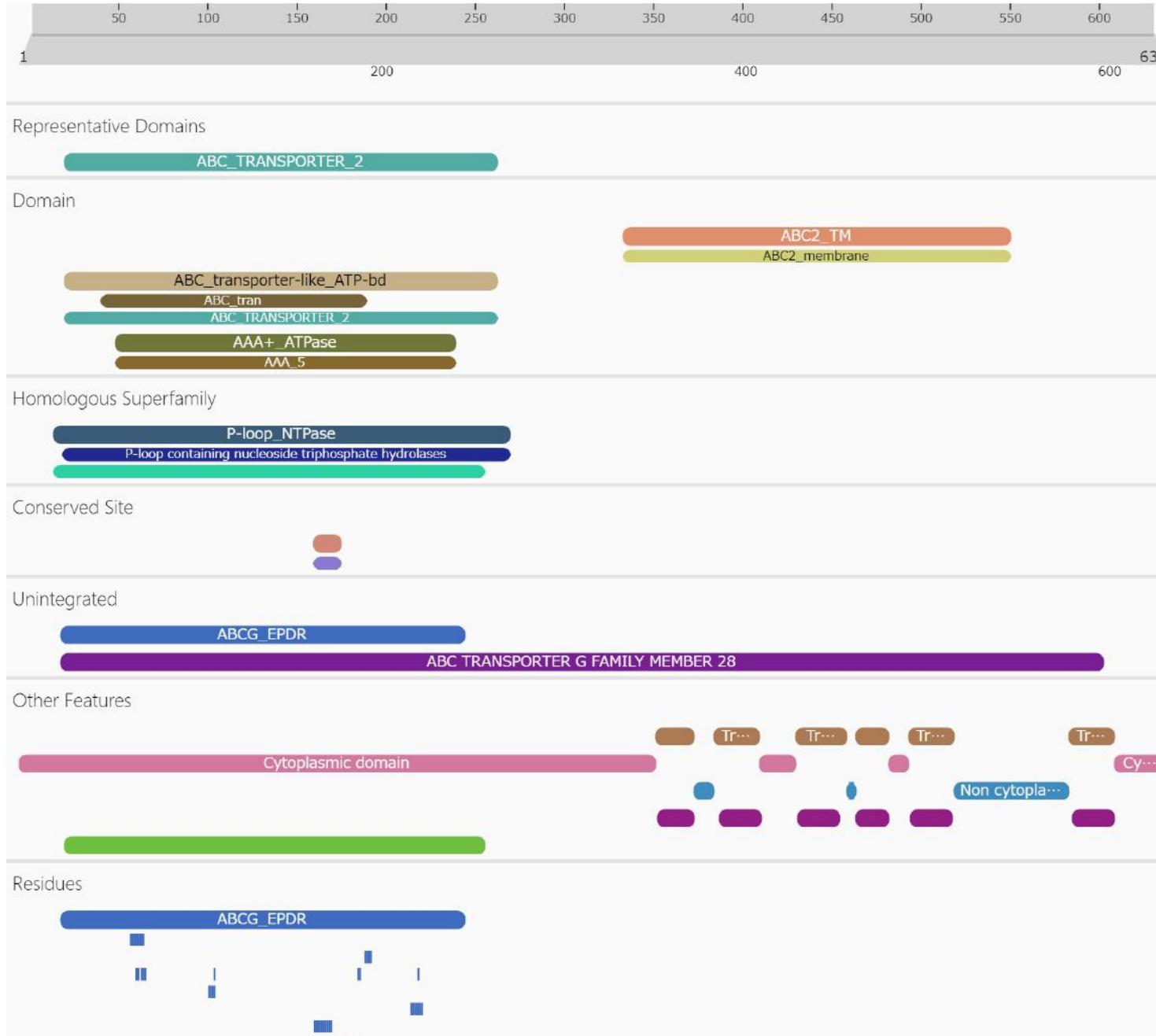
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TMHMM: TMhelix
PHOBIUS: TRANSMEMBRANE
MOBIDB LITE: mobidb-lite
PHOBIUS: NON_CYTOPLASMIC_DOMAIN

cd03213
Walker A/P-loop
ATP binding site
Walker B
D-loop
ABC transporter signature motif
Q-loop/lid
H-loop/switch region

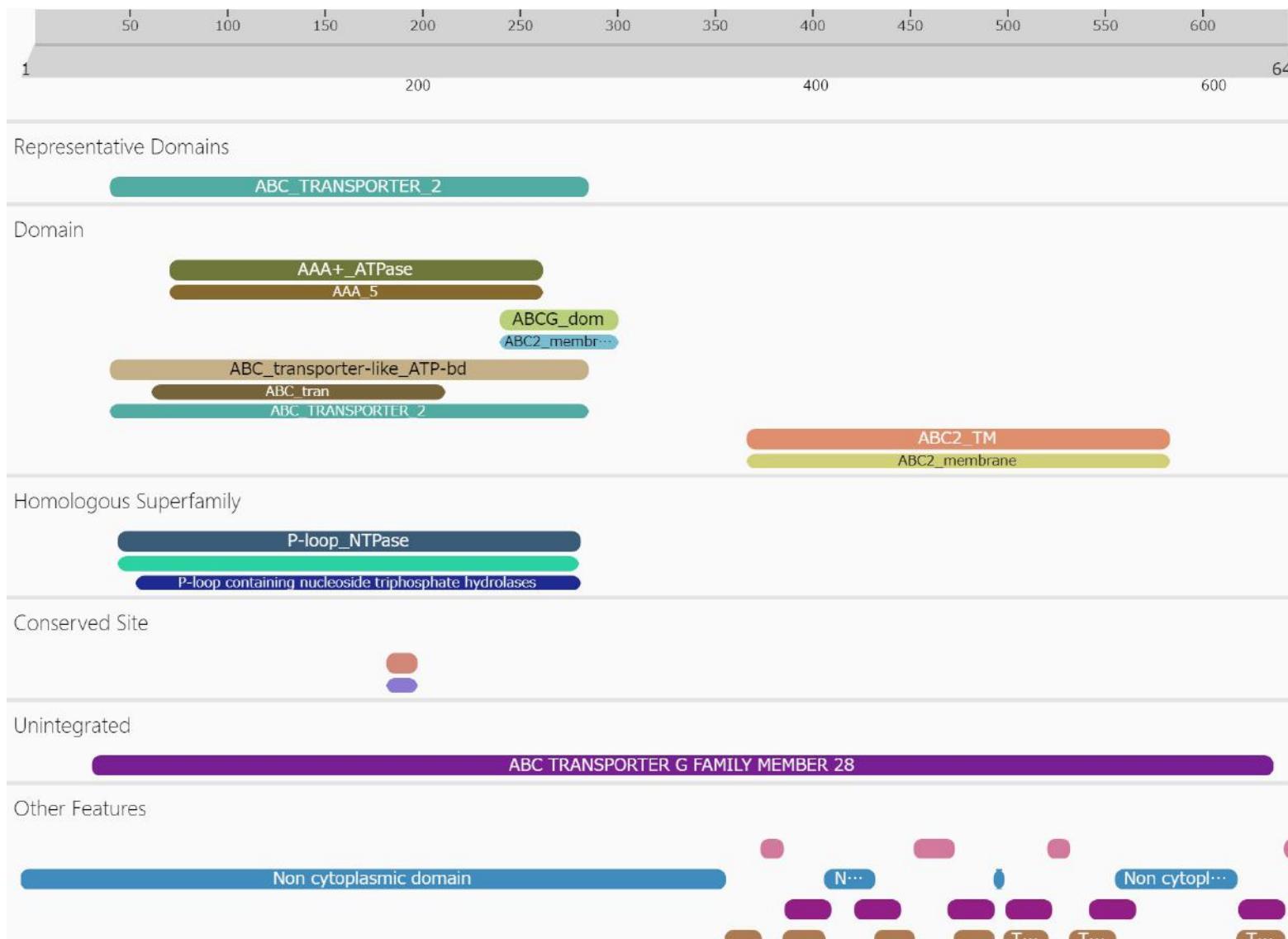
ABCG9



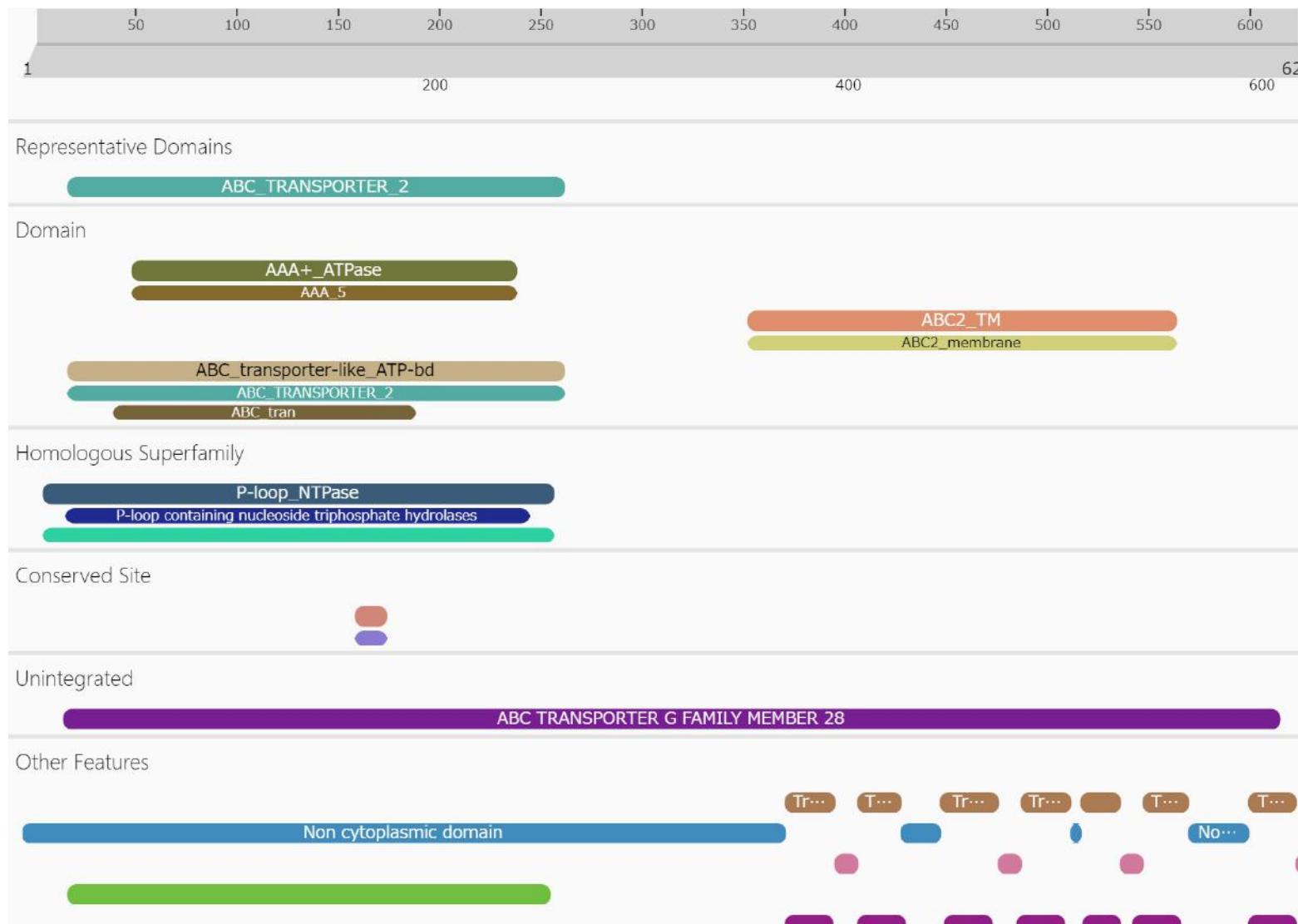
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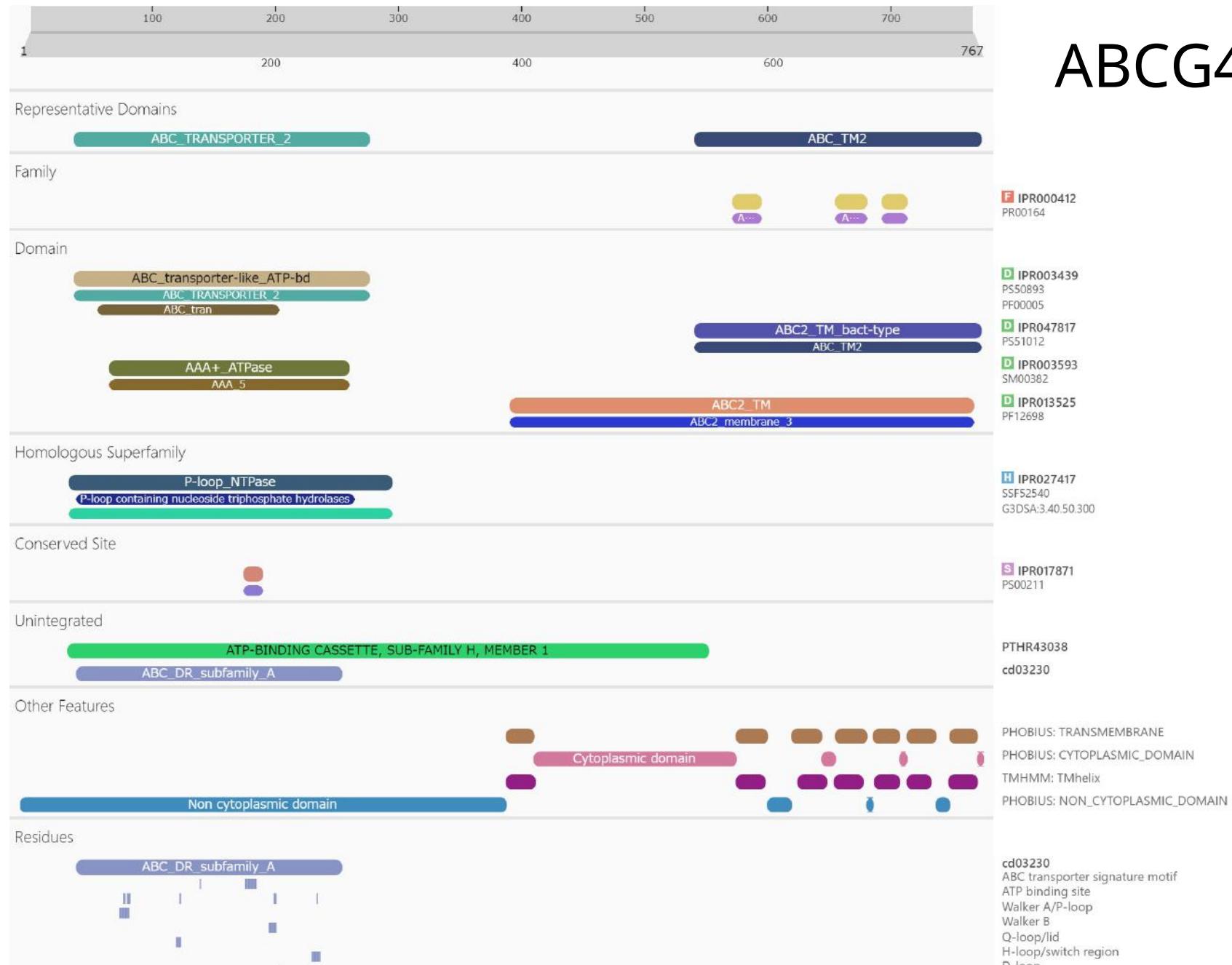
ABCG11



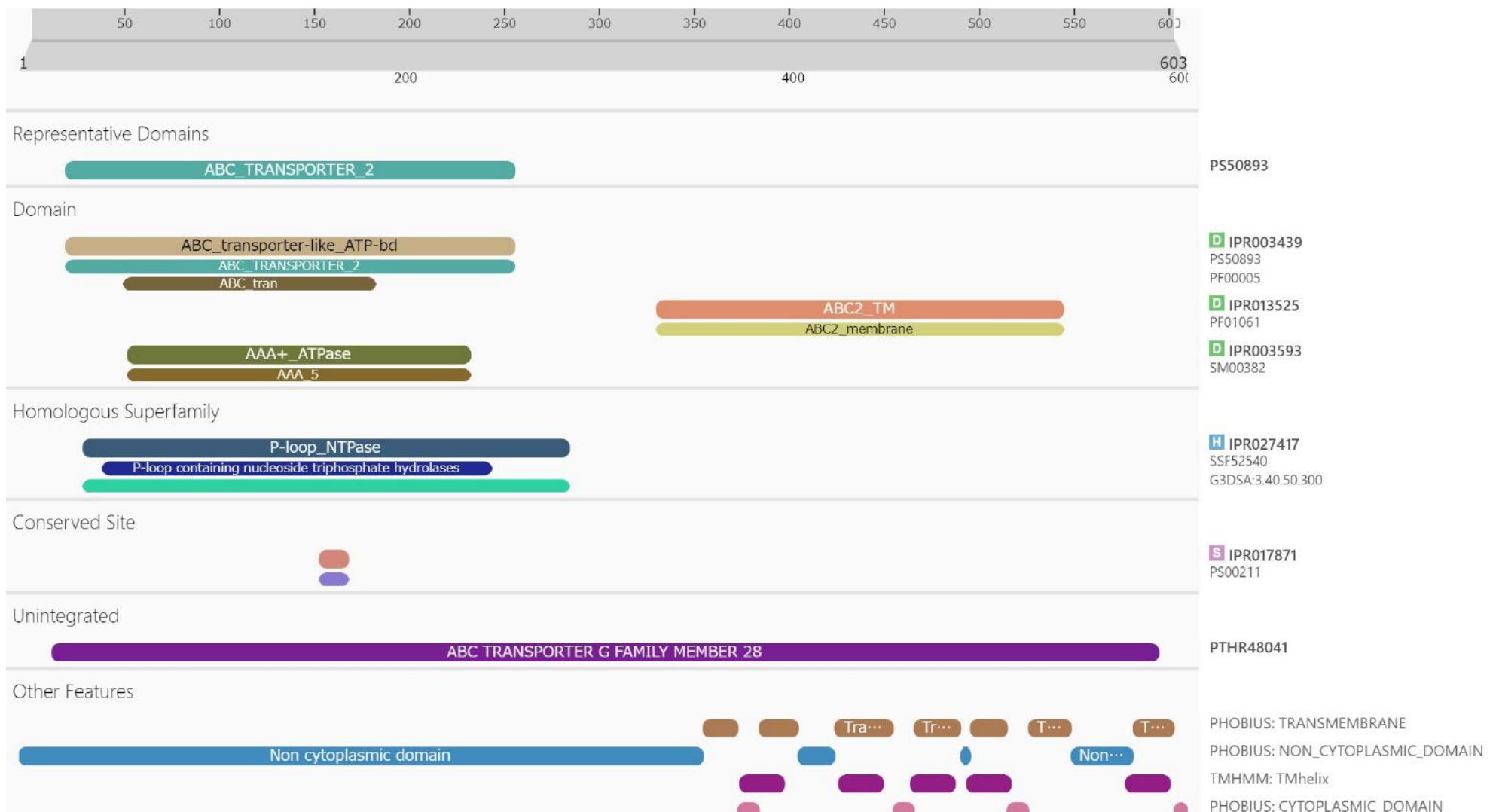
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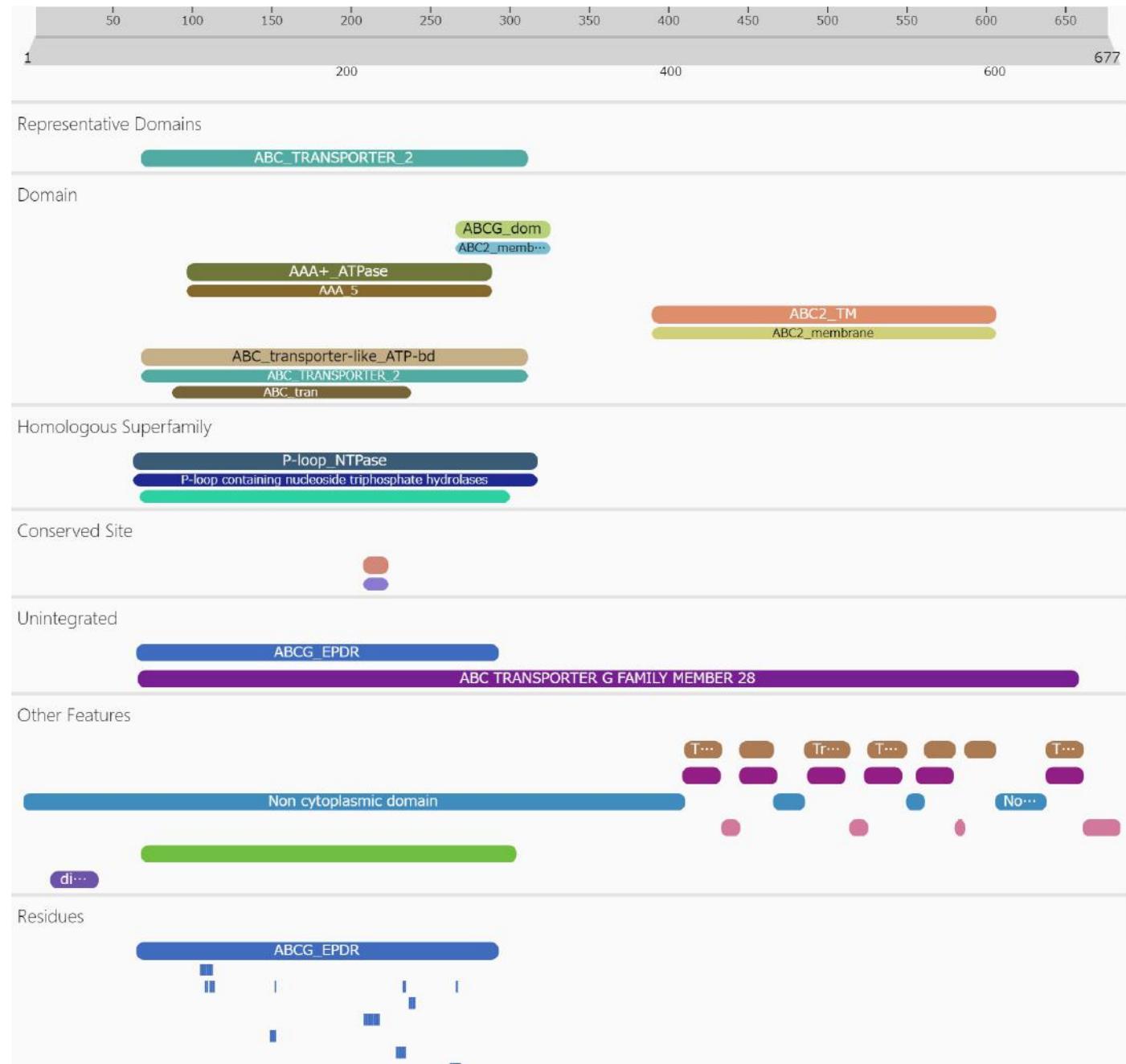
ABCG4-like1



ABCG23



ABCG4-like2



PS50893

D IPR043926
PF19055

D IPR003593
SM00382

D IPR013525
PF01061

D IPR003439
PS50893
PF00005

H IPR027417
SSF52540
G3DSA:3.40.50.300

S IPR017871
PS00211

cd03213
PTHR48041

PHOBIUS: TRANSMEMBRANE
TMHMM: TMhelix
PHOBIUS: NON_CYTOPLASMIC_DOMAIN
PHOBIUS: CYTOPLASMIC_DOMAIN
FUNFAM: G3DSA:3.40.50.300:FF:001077
MOBIDB LITE: mobidb-lite

cd03213
Walker A/P-loop
ATP binding site
D-loop
ABC transporter signature motif
Q-loop/lid
Walker B
H-loop/switch region

ABCG1-like1



PS50893

D IPR003593
SM00382
D IPR013525
PF01061
D IPR043926
PF19055
D IPR003439
PS50893
PF00005

H IPR027417
G3DSA:3.40.50.300
SSF52540

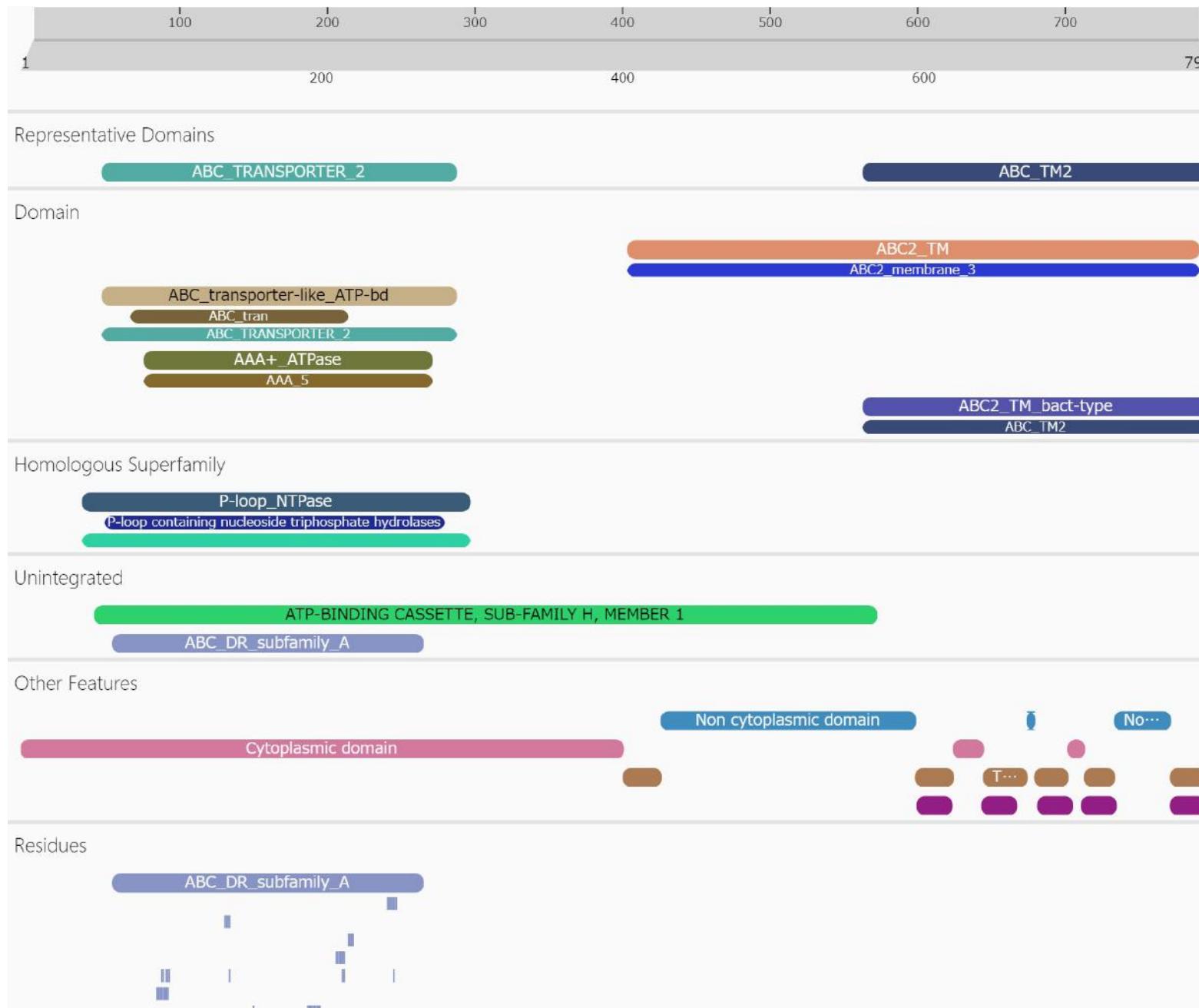
S IPR017871
PS00211

PTHR48041
cd03213

TMHMM: TMhelix
PHOBIUS: CYTOPLASMIC_DOMAIN
PHOBIUS: TRANSMEMBRANE
FUNFAM: G3DSA:3.40.50.300:FF:001077
PHOBIUS: NON_CYTOPLASMIC_DOMAIN
MOBIDB_LITE: mobidb-lite

cd03213
Walker A/P-loop
Walker B
ABC transporter signature motif
ATP binding site
D-loop
H-loop/switch region
Q-loop/lid

ABCG4-like3



■ IPR013525
 PF12698

■ IPR003439
 PF00005
 PS50893

■ IPR003593
 SM00382

■ IPR047817
 PS51012

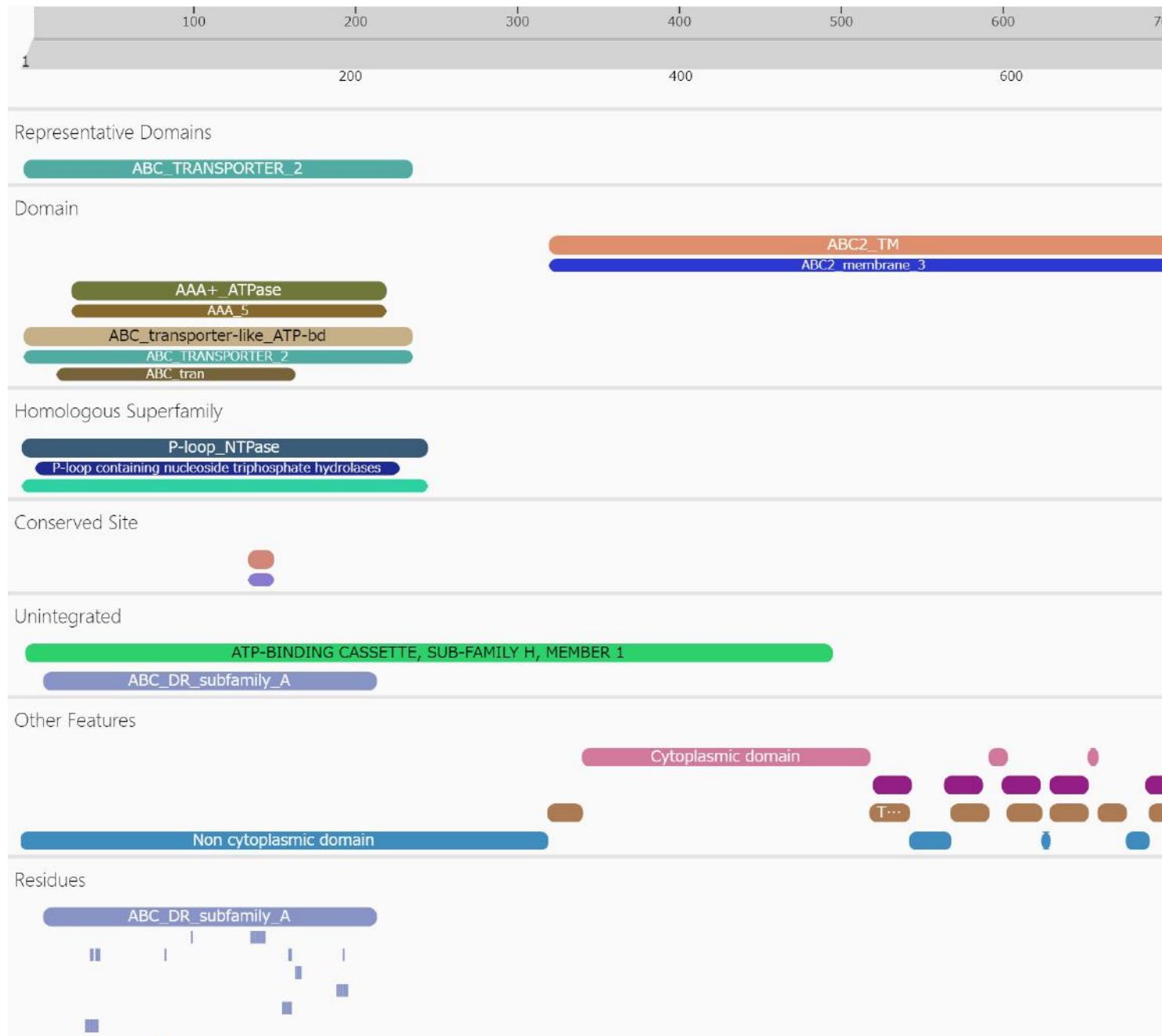
■ IPR027417
 SSF52540
 G3DSA:3.40.50.300

PTHR43038
 cd03230

PHOBIUS: NON_CYTOPLASMIC_DOMAIN
 PHOBIUS: CYTOPLASMIC_DOMAIN
 PHOBIUS: TRANSMEMBRANE
 TMHMM: TMhelix

cd03230
 H-loop/switch region
 Q-loop/lid
 D-loop
 Walker B
 ATP binding site
 Walker A/P-loop
 ABC transporter signature motif

ABC1



D IPR013525
PF12698

D IPR003593
SM00382

D IPR003439
PS50893
PF00005

H IPR027417
SSF52540
G3DSA:3.40.50.300

S IPR017871
PS00211

PTHR43038
cd03230

PHOBIUS: CYTOPLASMIC_DOMAIN
TMHMM: TMhelix
PHOBIUS: TRANSMEMBRANE
PHOBIUS: NON_CYTOPLASMIC_DOMAIN

ABCH2

