

**Supplementary Table S1.** Reference sequences used in this study.

<i>H. pylori</i> strain	<i>cgt</i> sequence	<i>luxS</i> sequence	Observations
7C	CP012905	CP012905	
29CaP	CP012907	CP012907	
35A	CP002096	CP002096	
51	CP000012	CP000012	
52	CP001680	CP001680	
83	CP002605	CP002605	
908	CP002184	CP002184	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain 2017
2017	CP002571	CP002571	
2018	CP002572	CP002572	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain 2017
26695	CP003904	CP003904	
26695 (2)	NC_000915	NC_000915	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain 26695
26695-1	AP013354	AP013354	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain 26695
26695-1MET	CP010436	CP010436	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain 26695
Aklavik86	CP003476	CP003476	
Aklavik117	CP003483	CP003483	
APP134	KU053359	KU053431	
ATCC 49503	KU053360	KU053432	
ATCC 51932	KU053361	KU053433	
B8	NC_014256	NC_014256	
B38	NC_012973	NC_012973	
B247	KU053362	KU053434	
B271	KU053363	KU053435	
B319	KU053364	KU053436	
B355	KU053365	KU053437	
B373	MG950173	MG950172	
B491	KU053366	KU053438	
B508S	KU053367	KU053439	
B657A-1	KU053370	KU053442	
B657C	KU053372	KU053444	
B659A	KU053373	KU053445	
BM012A	CP006888	CP006888	
BM012B	CP007605	CP007605	<i>luxS</i> sequence identical to that from the strain BM012A
BM012S	CP006889	CP006889	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain BM012A
BM013A	CP007604	CP007604	
BM013B	CP007606	CP007606	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain BM013A
CC33C	CP011484	CP011484	
CRL122	KU053375	KU053447	
Cuz20	CP002076	CP002076	
ELS37	CP002953	CP002953	
F16	AP011940	AP011940	
F30	AP011941	AP011941	
F32	AP011943	AP011943	

F57	AP011945	AP011945	
G27	NC_011333	NC_011333	
Gambia94/24	CP002332	CP002332	
Hp238	CP010013	CP010013	
HPAG1	NC_008086	NC_008086	
HUP-B14	NC_017733	NC_017733	
India7	CP002331	CP002331	
J99	NC_000921	NC_000921	
J166	CP007603	CP007603	<i>cgt</i> sequence identical to that from the strain B8
L7	CP011482	CP011482	
Lithuania75	CP002334	CP002334	
ML1	AP014710	AP014710	
ML2	AP014711	AP014711	
ML3	AP014712	AP014712	
OK113	AP012600	AP012600	<i>cgt</i> sequence identical to that from the strain F32
OK310	AP012601	AP012601	
oki102	CP006820	CP006820	
oki112	CP006821	CP006821	<i>cgt</i> sequence identical to that from the strain oki102
oki128	CP006822	CP006822	
oki154	CP006823	CP006823	
oki422	CP006824	CP006824	<i>luxS</i> sequence identical to that from the strain oki112
oki673	CP006825	CP006825	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain oki128
oki828	CP006826	CP006826	<i>luxS</i> sequence identical to that from the strain oki128
oki898	CP006827	CP006827	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain oki112
P12	NC_011498	NC_011498	
PeCan4	NC_014555	NC_014555	
PeCan18	NC_017742	NC_017742	
Puno120	CP002980	CP002980	
Puno135	CP002982	CP002982	<i>cgt</i> sequence identical to that from the strain F32
Rif1	CP003905	CP003905	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain 26695
Rif2	CP003906	CP003906	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain 26695
Sat464	CP002071	CP002071	
Shi112	NC_017741	NC_017741	<i>cgt</i> sequence identical to that from the strain Cuz20
Shi169	NC_017740	NC_017740	<i>cgt</i> sequence identical to that from the strain Sat464
Shi417	NC_017739	NC_017739	<i>cgt</i> sequence identical to that from the strain Sat464
Shi470	NC_010698	NC_010698	
SJM180	NC_014560	NC_014560	
SNT49	CP002983	CP002983	
SouthAfrica7	CP002336	CP002336	
SouthAfrica20	CP006691	CP006691	
SVC135	KU053376	KU053448	
UM032	CP005490	CP005490	<i>cgt</i> sequence identical to that from the strain ML2
UM037	CP005492	CP005492	
UM066	CP005493	CP005493	<i>cgt</i> sequence identical to that from the strain ML3
UM298	CP006610	CP006610	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain UM032

UM299	CP005491	CP005491	<i>cgt</i> and <i>luxS</i> sequences identical to these from the strain UM032
v225d	CP001582	CP001582	
XZ274	CP003419	CP003419	