**SUPPLEMENTARY INFORMATION**

***Vibrio neptunius* produces piscibactin and amphibactin and both siderophores contribute significantly to virulence for clams**

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**Table S1.** Oligonucleotides used for construction of mutants by allelic exchange, transcriptional fusions, and RT-PCR assays.

**Table S2.** Description of piscibactin genes and homology to those found in V. anguillarum and *P. damselae* subsp. *piscicida*.

**Table S3.** Distribution of amphibactin and piscibactin gene systems among mollusc pathogenic *Vibrio* species genomes available in the GeneBanc.

**Table S1.** Oligonucleotides used for construction of mutants by allelic exchange, transcriptional fusions, and RT-PCR assays.

|  |  |  |
| --- | --- | --- |
| **Oligonucleotide** | **Sequence**a **(5´→3´)** | **Amplification** **size (bp)** |
| ***irp2* defective mutant construction** |
| irp2 VN XbaI\_1\* | CGCTCTAGAACTTGCCGCAGGAGGTGGTG | 961 |
| irp2 VN BamHI\_2 | GGCGGATCCTGACAGCCGTTGCCTCCCAG |
| irp2 VN BamHI\_3 | GGCGGATCCCTGGTCCCAATCTTTGGCCA | 980 |
| irp2 VN EcoRI\_4\* | CGGGAATTCGAGTTGCCCATAAATTCAAT |
| ***absF* defective mutant construction** |  |
| absF VN XbaI\_1\* | CGCTCTAGACTGGATGAAATGCCTCTTTC | 898 |
| absF VN BamHI\_2 | GGCGGATCCATTCGCACCGGCATCTCATG |
| absF VN BamHI\_3 | GGCGGATCCCGTCACAAAACTTTGATCAC | 897 |
| absF VN EcoRI\_4\* | CGGGAATTCCTGGGCCACGCAGAATTTCT |
| ***abtC* promoter fusion construction** |
| abtC\_XbaI\* | GGCTCTAGAAGGAGACGTTGGATATCGAC | 705 |
| abtC\_BamHI | GGCGGATCCACCATTGTGACCAACAAGAG |
| ***abtA* promoter fusion construction** |
| abtA\_KpnI\* | CGCGGTACCGACTGCTATGTTCCAGGTAC | 680 |
| abtA\_EcoRI | GCCGAATTCAGACAGAGCGAACGCTACTG |
| ***absE* promoter fusion construction** |
| absE\_XbaI\* | GGCTCTAGAAATGAGCCACAAAGTGACGC | 761 |
| absE\_BamHI | GGCGGATCCCAACCATAGACGTTGCTGAG |
| ***araC1* promoter fusion construction** |
| araC1\_XbaI\* | CGCTCTAGAGAGGTTGACAGAGTCTCATC | 910 |
| araC1\_BamHI | CGCGGATCCACACGATGTGGCTTGAGAGC |
| ***frpA* promoter fusion construction** |  |  |
| frpAvn\_XbaI\* | GGCTCTAGAGATGATGTCCGATGTACACG | 740 |
| frpAvn\_BamHI | CGGGGATCCGATGATCATCACTTCCTGAC |
| **LacZ-R\*** | CGTAGGTAGTCACGCAACTC |  |
| **RT-PCR experiments** |
| **RT** | TCCGTTGAAACCACGCGAAC |  |
| **PCR1** |  |  |
| AbtCDB-F | TTTCTGCGACCATATCGTGG | 300 |
| AbtCDB-R | AACGCCAAGAGCGATCATGG |
| **PCR2** |  |  |
| AbtE-F | GTGTCACTGCACAAGTTGGG | 309 |
| AbtE-R | AGTGATACGAGTCACCAACC |
| **PCR3** |  |  |
| AbsEF-F | ACTTCTTTGCCGCTGCGACG | 300 |
| AbsEF-R | TGCACCTCTTCTGCTGGGAC |
| **PCR4** |  |  |
| AbtA/AbsB-F | CGATGCAACAGTTAGTTACC | 300 |
| AbtA/AbsB-R | TATCGTTGATGGCACTGCTG |

\*Pimer used to verify mutant construction or *lacZ* fusion by Sanger sequencing

aRecognition sequences for restriction enzymes are underlined.

Table S2. Description of piscibactin genes and homology to those found in V. anguillarum and *P. damselae* subsp. *piscicida*.

|  |  |  |
| --- | --- | --- |
| **Protein ID in*****V. neptunius*****PP-145.98** | **Predicted function (Gene name)** | **Comparison of identity with *V. neptunius* PP-145.98 with blastn and blastp** |
| ***V. neptunius* S2394** | ***V. coralliilyticus* RE22** | ***V. anguillarum* RV22** | ***P. damselae* subsp. *piscicida* DI21** |
| **DNA** | **AA** | **DNA** | **AA** | **DNA** | **AA** | **DNA** | **AA** |
| [WP\_206371146.1](https://www.ncbi.nlm.nih.gov/protein/1997936056) | AraC family transcriptional regulator (*araC1*) | 98 | 99 | 85 | 87 | 71 | 61 | 78 | 82 |
| [WP\_045975014.1](https://www.ncbi.nlm.nih.gov/protein/800946767) | AraC family transcriptional regulator(*araC2*) | 99 | 100 | 84 | 88 | 72 | 63 | 73 | 78 |
| [WP\_206371145.1](https://www.ncbi.nlm.nih.gov/protein/1997936055) | TonB-dependent receptor(*frpA*) | 99 | 99 | 87 | 89 | 66 | 63 | 76 | 80 |
| [WP\_206371144.1](https://www.ncbi.nlm.nih.gov/protein/1997936054) | Major facilitator superfamily protein (*irp8*) | 98 | 97 | 82 | 85 | 66 | 60 | 74 | 77 |
| [WP\_206371143.1](https://www.ncbi.nlm.nih.gov/protein/1997936053) | Non-ribosomal peptide synthetase (*irp1*) | 99 | 99 | 85 | 87 | 69 | 57 | 72 | 75 |
| [WP\_206371142.1](https://www.ncbi.nlm.nih.gov/protein/1997936052) | Non-ribosomal peptide synthetase (*irp2*) | 99 | 99 | 84 | 85 | 72 | 54 | 71 | 71 |
| [WP\_206371141.1](https://www.ncbi.nlm.nih.gov/protein/1997936051) | Oxidoreductase involved in siderophore biosynthesis *(irp3)* | 99 | 98 | 85 | 86 | 66 | 59 | 72 | 75 |
| [WP\_206371140.1](https://www.ncbi.nlm.nih.gov/protein/1997936050) | Thioesterase protein *(irp4)* | 99 | 98 | 86 | 90 | 68 | 58 | 75 | 75 |
| [WP\_206371139.1](https://www.ncbi.nlm.nih.gov/protein/1997936049) | Anthranilate synthase *(irp9)* | 99 | 99 | 84 | 91 | 70 | 61 | 73 | 77 |
| [WP\_206371138.1](https://www.ncbi.nlm.nih.gov/protein/1997936048) | 2,3-dihydroxybenzoate-AMP ligase *(irp5)* | 99 | 99 | 82 | 87 | 68 | 65 | 72 | 76 |
| [WP\_045975023.1](https://www.ncbi.nlm.nih.gov/protein/800946776) | ABC transporter ATP-binding protein (*mdlB*) | 99 | 100 | 84 | 89 | 67 | 60 | 74 | 80 |
| [WP\_206371137.1](https://www.ncbi.nlm.nih.gov/protein/1997936047) | ABC transporter ATP-binding protein (*mdlB*) | 98 | 99 | 84 | 89 | 68 | 59 | 73 | 79 |

Table S3. Distribution of amphibactin and piscibactin gene systems among mollusk pathogenic *Vibrio* species genomes available in the GeneBanc.

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **CLADE/SPECIE/STRAIN** | **PISCIBACTINA** |  | **ANFIBACTINA** |  | **Accession No.** |
| [**Query Cover**](https://blast.ncbi.nlm.nih.gov/Blast.cgi?CMD=Get&ADV_VIEW=yes&ADV_VIEW=on&ALIGNDB_BATCH_ID=300121191&ALIGNDB_CGI_HOST=blast.be-md.ncbi.nlm.nih.gov&ALIGNDB_CGI_PATH=/ALIGNDB/alndb_asn.cgi&ALIGNDB_MASTER_ALIAS=SD_ALIGNDB_MASTER&ALIGNDB_MAX_ROWS=100&ALIGNDB_ORDER_CLAUSE=seq_evalue%20asc,aln_id%20asc&ALIGNDB_WHERE_CLAUSE=seq_evalue%20is%20not%20null&ALIGNMENTS=100&ALIGNMENT_VIEW=Pairwise&CONFIG_DESCR=2,3,6,7,8,9,10,11,12&DATABASE_SORT=0&DESCRIPTIONS=100&DYNAMIC_FORMAT=on&FIRST_QUERY_NUM=0&FORMAT_NUM_ORG=1&FORMAT_OBJECT=Alignment&FORMAT_PAGE_TARGET=&FORMAT_TYPE=HTML&GET_SEQUENCE=yes&I_THRESH=&LINE_LENGTH=60&MASK_CHAR=2&MASK_COLOR=1&NUM_OVERVIEW=100&PAGE=MegaBlast&QUERY_INDEX=0&QUERY_NUMBER=0&RESULTS_PAGE_TARGET=&RID=5TTUBEAE016&SHOW_LINKOUT=yes&SHOW_OVERVIEW=yes&STEP_NUMBER=&USE_ALIGNDB=true&ADV_VIEW=on&DISPLAY_SORT=4&HSP_SORT=0) **(%)** | [**Per. Ident**](https://blast.ncbi.nlm.nih.gov/Blast.cgi?CMD=Get&ADV_VIEW=yes&ADV_VIEW=on&ALIGNDB_BATCH_ID=300121191&ALIGNDB_CGI_HOST=blast.be-md.ncbi.nlm.nih.gov&ALIGNDB_CGI_PATH=/ALIGNDB/alndb_asn.cgi&ALIGNDB_MASTER_ALIAS=SD_ALIGNDB_MASTER&ALIGNDB_MAX_ROWS=100&ALIGNDB_ORDER_CLAUSE=seq_evalue%20asc,aln_id%20asc&ALIGNDB_WHERE_CLAUSE=seq_evalue%20is%20not%20null&ALIGNMENTS=100&ALIGNMENT_VIEW=Pairwise&CONFIG_DESCR=2,3,6,7,8,9,10,11,12&DATABASE_SORT=0&DESCRIPTIONS=100&DYNAMIC_FORMAT=on&FIRST_QUERY_NUM=0&FORMAT_NUM_ORG=1&FORMAT_OBJECT=Alignment&FORMAT_PAGE_TARGET=&FORMAT_TYPE=HTML&GET_SEQUENCE=yes&I_THRESH=&LINE_LENGTH=60&MASK_CHAR=2&MASK_COLOR=1&NUM_OVERVIEW=100&PAGE=MegaBlast&QUERY_INDEX=0&QUERY_NUMBER=0&RESULTS_PAGE_TARGET=&RID=5TTUBEAE016&SHOW_LINKOUT=yes&SHOW_OVERVIEW=yes&STEP_NUMBER=&USE_ALIGNDB=true&ADV_VIEW=on&DISPLAY_SORT=3&HSP_SORT=3) **(%)** | [**Query Cover**](https://blast.ncbi.nlm.nih.gov/Blast.cgi?CMD=Get&ADV_VIEW=yes&ADV_VIEW=on&ALIGNDB_BATCH_ID=300121191&ALIGNDB_CGI_HOST=blast.be-md.ncbi.nlm.nih.gov&ALIGNDB_CGI_PATH=/ALIGNDB/alndb_asn.cgi&ALIGNDB_MASTER_ALIAS=SD_ALIGNDB_MASTER&ALIGNDB_MAX_ROWS=100&ALIGNDB_ORDER_CLAUSE=seq_evalue%20asc,aln_id%20asc&ALIGNDB_WHERE_CLAUSE=seq_evalue%20is%20not%20null&ALIGNMENTS=100&ALIGNMENT_VIEW=Pairwise&CONFIG_DESCR=2,3,6,7,8,9,10,11,12&DATABASE_SORT=0&DESCRIPTIONS=100&DYNAMIC_FORMAT=on&FIRST_QUERY_NUM=0&FORMAT_NUM_ORG=1&FORMAT_OBJECT=Alignment&FORMAT_PAGE_TARGET=&FORMAT_TYPE=HTML&GET_SEQUENCE=yes&I_THRESH=&LINE_LENGTH=60&MASK_CHAR=2&MASK_COLOR=1&NUM_OVERVIEW=100&PAGE=MegaBlast&QUERY_INDEX=0&QUERY_NUMBER=0&RESULTS_PAGE_TARGET=&RID=5TTUBEAE016&SHOW_LINKOUT=yes&SHOW_OVERVIEW=yes&STEP_NUMBER=&USE_ALIGNDB=true&ADV_VIEW=on&DISPLAY_SORT=4&HSP_SORT=0) **(%)** | [**Per. Ident**](https://blast.ncbi.nlm.nih.gov/Blast.cgi?CMD=Get&ADV_VIEW=yes&ADV_VIEW=on&ALIGNDB_BATCH_ID=300121191&ALIGNDB_CGI_HOST=blast.be-md.ncbi.nlm.nih.gov&ALIGNDB_CGI_PATH=/ALIGNDB/alndb_asn.cgi&ALIGNDB_MASTER_ALIAS=SD_ALIGNDB_MASTER&ALIGNDB_MAX_ROWS=100&ALIGNDB_ORDER_CLAUSE=seq_evalue%20asc,aln_id%20asc&ALIGNDB_WHERE_CLAUSE=seq_evalue%20is%20not%20null&ALIGNMENTS=100&ALIGNMENT_VIEW=Pairwise&CONFIG_DESCR=2,3,6,7,8,9,10,11,12&DATABASE_SORT=0&DESCRIPTIONS=100&DYNAMIC_FORMAT=on&FIRST_QUERY_NUM=0&FORMAT_NUM_ORG=1&FORMAT_OBJECT=Alignment&FORMAT_PAGE_TARGET=&FORMAT_TYPE=HTML&GET_SEQUENCE=yes&I_THRESH=&LINE_LENGTH=60&MASK_CHAR=2&MASK_COLOR=1&NUM_OVERVIEW=100&PAGE=MegaBlast&QUERY_INDEX=0&QUERY_NUMBER=0&RESULTS_PAGE_TARGET=&RID=5TTUBEAE016&SHOW_LINKOUT=yes&SHOW_OVERVIEW=yes&STEP_NUMBER=&USE_ALIGNDB=true&ADV_VIEW=on&DISPLAY_SORT=3&HSP_SORT=3) **(%)** |
| **CORALLIILYTICUS** **CLADE** |  |  |  |  |  |
| ***V. neptunius*** |  |  |  |  |  |
| S2394 | 100 | 94,8 | 99 | 99 | [GCA\_000967495.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000967495.1) |
| PP-256 | 100 | 100 | 100 | 100 | [GCA\_017051775.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017051775.1) |
| PP-259 | 97 | 91 | 99 | 98 | [GCA\_017051755.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017051755.1) |
| PP-307 | 100 | 100 | 100 | 100 | [GCA\_017051795.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017051795.1) |
| PP-313 | 100 | 100 | 100 | 100 | [GCA\_017051655.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017051655.1) |
| ***V. coralliilyticus*** |  |  |  |  |  |
| RE22 | 97 | 84,6 | 96 | 92,4 | [[GCA\_001297935.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001297935.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_930107324)  |
| S2043 | 97 | 84,6 | 92 | 93,2 | [[GCA\_000967485.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000967485.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_798719221)  |
| CN26H-1 | 97 | 84,5 | 94 | 92,7 | [GCA\_013266555.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013266555.1) |
| RE87 | 97 | 84,5 | 95 | 92,8 |  [[GCA\_002286655.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002286655.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_1239992497)  |
| P1 | 97 | 84,5 | 94 | 93,1 |  [[GCA\_000195475.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000195475.2)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_328565694)  |
| ATCC BAA-450 | 97 | 84,5 | 96 | 91,7 |  [[GCA\_000176135.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000176135.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_260605565)  |
| CN52H-1 | 97 | 84,5 | 94 | 93,3 | [GCA\_013266605.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013266605.1) |
| NA0301 | 97 | 84,5 | 95 | 93,1 | [[GCA\_002742585.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002742585.1),](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_1273326397)  |
| 09-121-3 | 97 | 84,5 | 99 | 92,2 |  [[GCA\_013114385.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114385.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_VTXP01000001)  |
| C154 | 97 | 84,5 | 93 | 92,6 |  [[GCA\_013113905.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013113905.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_VTYL01000001)  |
| 071316B | 97 | 84,5 | 93 | 92,6 |  [[GCA\_013114065.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114065.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_VTYG01000001)  |
| OfT6-17 | 97 | 84,4 | 93 | 92,5 | [GCA\_013266655.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013266655.1) |
| OfT6-21 | 97 | 84,4 | 93 | 92,5 | [GCA\_013266665.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013266665.1) |
| OfT7-21 | 97 | 84,4 | 90 | 92,5 |  [[GCA\_013266615.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013266615.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_JABSMY010000043)  |
| RE90 | 97 | 84,4 | 93 | 92,3 |  [[GCA\_013113815.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013113815.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_VTYR01000007)  |
| OCN008 | 97 | 85,3 | 97 | 92 |  [[GCA\_000461895.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000461895.1)](https://blast.ncbi.nlm.nih.gov/Blast.cgi#alnHdr_536748777)  |
| 081216C | - | - | 100 | 92 | [GCA\_013114055.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114055.1) |
| 080116A | - | - | 100 | 91,9 | [GCA\_002286405.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002286405.1) |
| MCA-25 | - | - | 100 | 91,9 | [GCA\_013266565.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013266565.1) |
| MCA-32 | - | - | 100 | 91,9 | [GCA\_013266595.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013266595.1) |
| AIC-5 | - | - | 99 | 92,3 | [GCA\_013114665.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114665.1) |
| AIC-7 | - | - | 99 | 92,3 | [GCA\_002287625.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002287625.1) |
| Vic-OC-068 | - | - | 99 | 92,2 | [GCA\_013364385.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013364385.1) |
| ATCC 19105 | - | - | 98 | 92,1 | [GCA\_013114685.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114685.1) |
| X00-12-4 | - | - | 95 | 92,9 | [GCA\_013113805.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013113805.1) |
| 58 | - | - | 99 | 92,3 | [GCA\_001693615.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001693615.1) |
| OCN014 | 97 | 84,9 | 94 | 92,7 | [GCA\_000763535.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000763535.2) |
| SNUTY-1 | 97 | 84 | 94 | 93 | [GCA\_002073995.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002073995.1) |
| RE98 | - | - | 95 | 93 | [GCA\_000772065.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000772065.1) |
| ***V. ostreicida*** |  |  |  |  |  |
| 203 | 57 | 67,1 | 86 | 66,8 | [GCA\_001957165.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001957165.1) |
| UCD-KL16 | 58 | 67 | 86 | 66,7 | [GCA\_013074385.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_013074385.2) |
| **PECTENICIDA****CLADE** |  |  |  |  |  |
| ***V. pectenicida*** |  |  |  |  |  |
| CAIM 594 | - | - | - | - | [GCA\_003937805.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003937805.1) |
| 99-46-Y | - | - | - | - | [GCA\_013114615.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114615.1) |
| **ORIENTALIS****CLADE** |  |  |  |  |  |
| ***V. bivalvicida*** |  |  |  |  |  |
| 605 | - | - | 97 | 87,5 | [GCA\_001399455.2](https://www.ncbi.nlm.nih.gov/assembly/GCF_001399455.2/) |
| ***V. europaeus*** |  |  |  |  |  |
| PP-638 | - | - | 95 | 87 | [GCA\_001695575.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001695575.1) |
| 071316F | - | - | 95 | 87 | [GCA\_013114045.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114045.1) |
| NPI-1 | - | - | - | - | [GCA\_013154935.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013154935.1) |
| 07/118 T2 | - | - | - | - | [GCA\_015654285.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_015654285.1) |
| ***V. tubiashii*** |  |  |  |  |  |
| 01-65-5-1 | - | - | 95 | 88,4 | [GCA\_013114395.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114395.1) |
| ATCC 19109 | - | - | 56 | 88 | [GCA\_000772105.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000772105.1) |
| NCIMB 1337 | - | - | 95 | 88 | [GCA\_000259295.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000259295.1) |
| **HARVEYI****CLADE** |  |  |  |  |  |
| ***V. alginolyiticus*** |  |  |  |  |  |
| NBRC 15630 | - | - | - | - | [GCA\_000467145.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000467145.1) |
| 138-2 | - | - | - | - | [GCA\_012151155.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012151155.1) |
| YM19 | - | - | - | - | [GCA\_012151455.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012151455.1) |
| BNVF9 | - | - | - | - | [GCA\_903986595.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_903986595.1) |
| NCTC12160 | - | - | - | - | [GCA\_900460285.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_900460285.1) |
| 12G01 | - | - | - | - | [GCA\_000153505.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000153505.1) |
| ATCC 17749 | - | - | - | - | [GCA\_000354175.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000354175.2) |
| FDAARGOS\_98 | - | - | - | - | [GCA\_001525595.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_001525595.2) |
| EPGS | - | - | - | - | [GCA\_001273715.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001273715.1) |
| 2014V-1011 | - | - | - | - | [GCA\_009763085.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_009763085.1) |
| BSW8 | - | - | - | - | [GCA\_000834155.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000834155.1) |
| BSW15 | - | - | - | - | [GCA\_000834085.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000834085.1) |
| VN-7501 | - | - | - | - | [GCA\_001617475.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001617475.1) |
| V1 | - | - | - | - | [GCA\_001013315.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001013315.1) |
| RM-10-2 | - | - | - | - | [GCA\_001267615.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001267615.1) |
| UCD-30C | - | - | - | - | [GCA\_001306785.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001306785.1) |
| UCD-32C | - | - | - | - | [GCA\_001306825.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001306825.1) |
| UCD-53C | - | - | - | - | [GCA\_001306845.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001306845.1) |
| UCD-9C | - | - | - | - | [GCA\_001306875.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001306875.1) |
| ATCC 33787 | - | - | - | - | [GCA\_001469735.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001469735.1) |
| ANC4-19 | - | - | - | - | [GCA\_001584265.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001584265.1) |
| ZJ-T | - | - | - | - | [GCA\_001679745.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001679745.1) |
| 10N.261.52.A3 | - | - | - | - | [GCA\_005145885.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005145885.1) |
| K01M1 | - | - | - | - | [GCA\_002119505.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_002119505.2) |
| K04M1 | - | - | - | - | [GCA\_003613035.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003613035.1) |
| K04M3 | - | - | - | - | [GCA\_002149105.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002149105.1) |
| K04M5 | - | - | - | - | [GCA\_002119545.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002119545.1) |
| K05K4 | - | - | - | - | [GCA\_003613065.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003613065.1) |
| K06K5 | - | - | - | - | [GCA\_002119565.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002119565.1) |
| K08M3 | - | - | - | - | [GCA\_002149085.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002149085.1) |
| K08M4 | - | - | - | - | [GCA\_002119525.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002119525.1) |
| K09K1 | - | - | - | - | [GCA\_002149065.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002149065.1) |
| K10K4 | - | - | - | - | [GCA\_002119585.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002119585.1) |
| QD-5 | - | - | - | - | [GCA\_002114195.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002114195.1) |
| BM517 | - | - | - | - | [GCA\_002868815.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002868815.1) |
| 40B | - | - | - | - | [GCA\_000176055.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000176055.1) |
| Hep-1a-2 | - | - | - | - | [GCA\_006124875.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_006124875.1) |
| LF TCBS 15 | - | - | - | - | [GCA\_004283075.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004283075.1) |
| DFP1994 | - | - | - | - | [GCA\_014769135.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_014769135.1) |
| M3-10 | - | - | - | - | [GCA\_008271565.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_008271565.1) |
| BR233 | - | - | - | - | [GCA\_004349375.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004349375.1) |
| FA2 | - | - | - | - | [GCA\_011801435.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_011801435.1) |
| 062916C | - | - | - | - | [GCA\_013114005.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114005.1) |
| S6-61 | - | - | - | - | [GCA\_008921745.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_008921745.1) |
| Vb1167 | - | - | - | - | [GCA\_012956205.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012956205.1) |
| GS\_MYPK1 | - | - | - | - | [GCA\_013368735.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013368735.1) |
| Vb1833 | - | - | - | - | [GCA\_014274185.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_014274185.1) |
| VP318 | - | - | - | - | [GCA\_016823165.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_016823165.1) |
| AP-1 | - | - | - | - | [GCA\_016937625.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_016937625.1) |
| E06333 | - | - | - | - | [GCA\_017161465.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017161465.1) |
| Vb2145 | - | - | - | - | [GCA\_017313625.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017313625.1) |
| BW13 | - | - | - | - | [GCA\_018831165.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018831165.1) |
| VA114 | - | - | - | - | [GCA\_018458125.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018458125.1) |
| VaAres1\_A | - | - | - | - | [GCA\_018779875.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018779875.1) |
| **ANGUILLARUM** **CLADE** |  |  |  |  |  |
| ***V. aestuarianus*** |  |  |  |  |  |
| O-00-16-10 | - | - | - | - | [GCA\_013114495.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114495.1) |
| 03/008t | - | - | - | - | [GCA\_011090235.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_011090235.1) |
| 12/122 3T3 | - | - | - | - | [GCA\_011090275.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_011090275.1) |
| 15/075 3T2 | - | - | - | - | [GCA\_011090175.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_011090175.1) |
| 15/064 3T2 | - | - | - | - | [GCA\_011090265.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_011090265.1) |
| 15/061\_1T1 | - | - | - | - | [GCA\_011090225.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_011090225.1) |
| 02/041 | - | - | - | - | [GCA\_012395215.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012395215.1) |
| LMG 7909 | - | - | - | - | [GCA\_012395185.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012395185.1) |
| 01/151 | - | - | - | - | [GCA\_012689365.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012689365.1) |
| 07/115 | - | - | - | - | [GCA\_012689305.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012689305.1) |
| 01/032 | - | - | - | - | [GCA\_012689315.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012689315.1) |
| 01/308 | - | - | - | - | [GCA\_012689405.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_012689405.1) |
| **SPLENDIDUS****CLADE** |  |  |  |  |  |
| ***V. splendidus*** |  |  |  |  |  |
| ZS-139 | - | - | 57 | 71 | [GCA\_000272225.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272225.2) |
| ZF-90 | - | - | 62 | 70,6 | [GCA\_000272125.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272125.2) |
| 10N.222.51.F9 | - | - | 60 | 70,35 | [GCA\_002875395.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002875395.1) |
| 10N.222.52.F3 | - | - | 58 | 70,3 | [GCA\_002876645.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876645.1) |
| 10N.286.45.F12 | - | - | 58 | 70,8 | [GCA\_002872895.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002872895.1) |
| 10N.261.49.A1 | - | - | 59 | 70,4 | [GCA\_002876905.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876905.1) |
| 10N.261.45.E8 | - | - | 59 | 70,4 | [GCA\_002876785.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876785.1) |
| 10N.286.46.A4 | - | - | 58 | 70,4 | [GCA\_002874245.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002874245.1) |
| 1A01 | - | - | 60 | 70,8 | [GCA\_002700025.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002700025.1) |
| ZS\_173 | - | - | 62 | 70,6 | [GCA\_003050225.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050225.1) |
| CECT 8714 | - | - | - | - | [GCA\_900089845.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_900089845.1) |
| 12B01 | - | - | - | - | [GCA\_000152765.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000152765.1) |
| 12E03 | - | - | - | - | [GCA\_000272105.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272105.2) |
| 5S-101 | - | - | - | - | [GCA\_000272245.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272245.2) |
| FF-500 | - | - | - | - | [GCA\_000272265.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272265.2) |
| FF-6 | - | - | - | - | [GCA\_000272325.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272325.2) |
| 1F-157 | - | - | - | - | [GCA\_000272345.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272345.2) |
| 0407ZC148 | - | - | - | - | [GCA\_000272285.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272285.1) |
| 1S-124 | - | - | - | - | [GCA\_000272305.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272305.2) |
| LRBAC | - | - | - | - | [GCA\_003732565.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003732565.1) |
| UCD-SED7 | - | - | - | - | [GCA\_001306195.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001306195.1) |
| UCD-SED10 | - | - | - | - | [GCA\_001306215.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001306215.1) |
| MARa | - | - | - | - | [GCA\_001558055.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001558055.1) |
| 13B01 | - | - | - | - | [GCA\_001691275.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001691275.1) |
| UCD-FRSSP16\_15 | - | - | - | - | [GCA\_001676015.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001676015.1) |
| 10N.286.52.F10 | - | - | - | - | [GCA\_002873735.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002873735.1) |
| CAIM 1923 | - | - | - | - | [GCA\_003573805.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003573805.1) |
| VaAn | - | - | - | - | [GCA\_002078155.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002078155.1) |
| ORI231 | - | - | - | - | [GCA\_002954555.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002954555.1) |
| OU02 | - | - | - | - | [GCA\_003408655.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003408655.1) |
| DSM 19640 | - | - | - | - | [GCA\_002737025.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002737025.1) |
| 3C02 | - | - | - | - | [GCA\_018729395.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018729395.1) |
| 5S\_210 | - | - | - | - | [GCA\_003050445.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050445.1) |
| G2R10 | - | - | - | - | [GCA\_018860405.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018860405.1) |
| BST398 | - | - | - | - | [GCA\_003345295.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003345295.1) |
| S7 | - | - | - | - | [GCA\_007858915.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_007858915.1) |
| 99-70-6B3 | - | - | - | - | [GCA\_013114435.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114435.1) |
| 07-146-1 | - | - | - | - | [GCA\_013114485.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114485.1) |
| 99-70-13A3 | - | - | - | - | [GCA\_013114445.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114445.1) |
| X00-12-3 | - | - | - | - | [GCA\_013114425.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_013114425.1) |
| ATCC 33789 | - | - | - | - | [GCA\_000222625.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000222625.2) |
| 12F01 | - | - | - | - | [GCA\_000256485.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000256485.1) |
| 10N.261.46.E9 | - | - | - | - | [GCA\_002876825.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876825.1) |
| NCCB 53037 | - | - | - | - | [GCA\_001558015.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001558015.1) |
| MOR2 | - | - | - | - | [GCA\_001557765.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001557765.1) |
| MOR1 | - | - | - | - | [GCA\_001557875.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001557875.1) |
| 10N.286.49.F1 | - | - | - | - | [GCA\_002873455.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002873455.1) |
| 10N.222.51.F8 | - | - | - | - | [GCA\_002875345.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002875345.1) |
| 10N.222.54.F7 | - | - | - | - | [GCA\_002875495.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002875495.1) |
| 10N.222.52.A7 | - | - | - | - | [GCA\_002876565.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876565.1) |
| 10N.261.45.A2 | - | - | - | - | [GCA\_002875585.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002875585.1) |
| 10N.261.52.F2 | - | - | - | - | [GCA\_002877195.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002877195.1) |
| 10N.261.48.B7 | - | - | - | - | [GCA\_002876045.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876045.1) |
| 10N.286.45.A10 | - | - | - | - | [GCA\_002877525.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002877525.1) |
| 10N.286.48.F4 | - | - | - | - | [GCA\_002878565.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002878565.1) |
| ZS\_90 | - | - | - | - | [GCA\_003050125.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050125.1) |
| 1S\_14 | - | - | - | - | [GCA\_003050485.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050485.1) |
| 1S\_296 | - | - | - | - | [GCA\_003050465.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050465.1) |
| 5S\_57 | - | - | - | - | [GCA\_003050255.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050255.1) |
| 5S\_226 | - | - | - | - | [GCA\_003050345.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050345.1) |
| ZS\_82 | - | - | - | - | [GCA\_003050175.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050175.1) |
| 5S\_245 | - | - | - | - | [GCA\_003050385.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050385.1) |
| ZS\_107 | - | - | - | - | [GCA\_003049945.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003049945.1) |
| 5S\_238 | - | - | - | - | [GCA\_003050425.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050425.1) |
| ZS\_181 | - | - | - | - | [GCA\_003050245.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050245.1) |
| 5S\_279 | - | - | - | - | [GCA\_003050355.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050355.1) |
| 1S\_113 | - | - | - | - | [GCA\_003050505.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050505.1) |
| 5S\_283 | - | - | - | - | [GCA\_003050285.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050285.1) |
| 1S\_146 | - | - | - | - | [GCA\_003050545.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050545.1) |
| ZS\_58 | - | - | - | - | [GCA\_003049845.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003049845.1) |
| ZF\_41 | - | - | - | - | [GCA\_003049865.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003049865.1) |
| 5S\_122 | - | - | - | - | [GCA\_003050405.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050405.1) |
| ZS\_198 | - | - | - | - | [GCA\_003050205.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050205.1) |
| 1S\_129 | - | - | - | - | [GCA\_003050025.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050025.1) |
| ZS\_2 | - | - | - | - | [GCA\_003050165.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050165.1) |
| ZS\_117 | - | - | - | - | [GCA\_003050005.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050005.1) |
| ZS\_138 | - | - | - | - | [GCA\_003049975.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003049975.1) |
| ZS\_213 | - | - | - | - | [GCA\_003049925.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003049925.1) |
| ZS\_185 | - | - | - | - | [GCA\_003049855.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003049855.1) |
| 1F\_55 | - | - | - | - | [GCA\_003050045.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003050045.1) |
| ***V. tasmaniensis*** |  |  |  |  |  |
| UCD-FRSSP16\_25 | - | - | 58 | 71 | [GCA\_001675865.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001675865.1) |
| UCD-FRSSP16\_35 | - | - | 56 | 71 | [GCA\_001675955.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001675955.1) |
| ZS-17 | - | - | 58 | 70 | [GCA\_000272445.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272445.2) |
| SM1924 | - | - | 57 | 71 | [GCA\_007786305.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_007786305.1) |
| 1F-187 | - | - | - | - | [GCA\_000272405.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272405.2) |
| 1F-155 | - | - | - | - | [GCA\_000272385.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272385.2) |
| 1F-267 | - | - | - | - | [GCA\_000272365.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272365.2) |
| 5F-79 | - | - | - | - | [GCA\_000272425.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272425.1) |
| 10N.222.45.E7 | - | - | - | - | [GCA\_005146675.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005146675.1) |
| 10N.222.48.A2 | - | - | - | - | [GCA\_002875145.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002875145.1) |
| 10N.222.45.A8 | - | - | - | - | [GCA\_005146825.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005146825.1) |
| 10N.222.45.A2 | - | - | - | - | [GCA\_005146875.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005146875.1) |
| 10N.222.45.A1 | - | - | - | - | [GCA\_005146635.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005146635.1) |
| 10N.222.45.A4 | - | - | - | - | [GCA\_005146895.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005146895.1) |
| 10N.261.51.E11 | - | - | - | - | [GCA\_002876245.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876245.1) |
| 10N.261.52.A6 | - | - | - | - | [GCA\_002876335.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876335.1) |
| 10N.222.45.A3 | - | - | - | - | [GCA\_005146915.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005146915.1) |
| 10N.222.51.A7 | - | - | - | - | [GCA\_002876485.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_002876485.1) |
| 10N.222.45.A5 | - | - | - | - | [GCA\_005146845.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_005146845.1) |
| J5-9 | - | - | - | - | [GCA\_004761895.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004761895.1) |
| J5-13 | - | - | - | - | [GCA\_004764445.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004764445.1) |
| J0-13 | - | - | - | - | [GCA\_004761905.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004761905.1) |
| LMG 20012 | - | - | - | - | [GCA\_006333845.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_006333845.1) |
| ***V. crassostreae*** |  |  |  |  |  |
| J2-9 | - | - | - | - | [GCA\_001368855.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001368855.1) |
| J5-4 | - | - | - | - | [GCA\_001368875.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_001368875.1) |
| 9CS106 | - | - | - | - | [GCA\_000272185.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272185.2) |
| 9ZC13 | - | - | - | - | [GCA\_000272045.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272045.2) |
| 9ZC77 | - | - | - | - | [GCA\_000272065.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272065.2) |
| 9ZC88 | - | - | - | - | [GCA\_000272205.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272205.2) |
| ZF-91 | - | - | - | - | [GCA\_000272085.2](https://www.ncbi.nlm.nih.gov/assembly/GCA_000272085.2) |
| SOB6\_12 | - | - | - | - | [GCA\_004342375.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004342375.1) |
| SOB7\_9 | - | - | - | - | [GCA\_003814675.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003814675.1) |
| SOS2\_11 | - | - | - | - | [GCA\_004341745.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004341745.1) |
| SOS4\_4 | - | - | - | - | [GCA\_003814595.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003814595.1) |
| SOT2\_12 | - | - | - | - | [GCA\_003814775.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003814775.1) |
| SOT7\_11 | - | - | - | - | [GCA\_004342865.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004342865.1) |
| SOT8\_11 | - | - | - | - | [GCA\_003814975.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003814975.1) |
| 16BF1\_28 | - | - | - | - | [GCA\_004342955.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004342955.1) |
| 16BF1\_56 | - | - | - | - | [GCA\_004345545.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004345545.1) |
| 16BF1\_95 | - | - | - | - | [GCA\_004342305.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004342305.1) |
| 16BF5\_48 | - | - | - | - | [GCA\_004341905.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_004341905.1) |
| 16SF1\_51 | - | - | - | - | [GCA\_003751935.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003751935.1) |
| 16SF1\_87 | - | - | - | - | [GCA\_003751925.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_003751925.1) |
| 33\_O\_99 | - | - | - | - | [GCA\_017917535.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917535.1) |
| 33\_O\_98 | - | - | - | - | [GCA\_017917555.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917555.1) |
| 28\_O\_18 | - | - | - | - | [GCA\_017917955.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917955.1) |
| 28\_O\_21 | - | - | - | - | [GCA\_017917965.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917965.1) |
| 26\_O\_12 | - | - | - | - | [GCA\_017918095.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017918095.1) |
| 33\_O\_91 | - | - | - | - | [GCA\_017917635.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917635.1) |
| 28\_O\_30 | - | - | - | - | [GCA\_017917875.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917875.1) |
| 7Z\_4 | - | - | - | - | [GCA\_017916775.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916775.1) |
| 37\_O\_172 | - | - | - | - | [GCA\_017917455.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917455.1) |
| LGP15 | - | - | - | - | [GCA\_017916495.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916495.1) |
| 28\_O\_28 | - | - | - | - | [GCA\_017917915.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917915.1) |
| 45\_O\_295 | - | - | - | - | [GCA\_017917195.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917195.1) |
| 28\_O\_17 | - | - | - | - | [GCA\_017918065.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017918065.1) |
| 42\_O\_252 | - | - | - | - | [GCA\_017917235.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917235.1) |
| 47\_O\_357 | - | - | - | - | [GCA\_017916915.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916915.1) |
| 28\_O\_24 | - | - | - | - | [GCA\_017917995.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917995.1) |
| J5-6 | - | - | - | - | [GCA\_017916555.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916555.1) |
| 31\_O\_77 | - | - | - | - | [GCA\_017917735.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917735.1) |
| 37\_O\_187 | - | - | - | - | [GCA\_017917355.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917355.1) |
| 7G1-1 | - | - | - | - | [GCA\_018440535.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018440535.1) |
| 7D8\_10 | - | - | - | - | [GCA\_017916815.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916815.1) |
| 46\_O\_324 | - | - | - | - | [GCA\_017917055.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917055.1) |
| 31\_O\_82 | - | - | - | - | [GCA\_017917655.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917655.1) |
| 7F1\_18 | - | - | - | - | [GCA\_017916825.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916825.1) |
| 45\_O\_294 | - | - | - | - | [GCA\_017917135.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917135.1) |
| J5-23 | - | - | - | - | [GCA\_017916595.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916595.1) |
| 8F5-39 | - | - | - | - | [GCA\_018440505.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018440505.1) |
| 34\_O\_104 | - | - | - | - | [GCA\_017917495.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917495.1) |
| 37\_O\_183 | - | - | - | - | [GCA\_017917395.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917395.1) |
| J2-13 | - | - | - | - | [GCA\_017916615.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916615.1) |
| 47\_O\_349 | - | - | - | - | [GCA\_017917015.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917015.1) |
| 31\_O\_72 | - | - | - | - | [GCA\_017917765.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917765.1) |
| 45\_O\_306 | - | - | - | - | [GCA\_017918195.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017918195.1) |
| 45\_O\_293 | - | - | - | - | [GCA\_017917215.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917215.1) |
| 29\_O\_51 | - | - | - | - | [GCA\_017917755.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917755.1) |
| 45\_O\_291 | - | - | - | - | [GCA\_017917285.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917285.1) |
| 47\_O\_358 | - | - | - | - | [GCA\_017916895.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916895.1) |
| J5-24 | - | - | - | - | [GCA\_017916625.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916625.1) |
| 31\_O\_75 | - | - | - | - | [GCA\_017917695.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917695.1) |
| 29\_O\_45 | - | - | - | - | [GCA\_017917815.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917815.1) |
| 32\_O\_89 | - | - | - | - | [GCA\_017917615.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917615.1) |
| 38\_P\_218 | - | - | - | - | [GCA\_017917315.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917315.1) |
| 45\_P\_323 | - | - | - | - | [GCA\_017917035.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917035.1) |
| J5-28 | - | - | - | - | [GCA\_017916575.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916575.1) |
| 47\_O\_352 | - | - | - | - | [GCA\_017916955.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916955.1) |
| 47\_O\_347 | - | - | - | - | [GCA\_017917075.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917075.1) |
| 29\_O\_34 | - | - | - | - | [GCA\_017917855.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917855.1) |
| 46\_O\_330 | - | - | - | - | [GCA\_017918175.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017918175.1) |
| 37\_O\_186 | - | - | - | - | [GCA\_017917365.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017917365.1) |
| 29\_O\_42 | - | - | - | - | [GCA\_018440585.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_018440585.1) |
| 47\_O\_359 | - | - | - | - | [GCA\_017916855.1](https://www.ncbi.nlm.nih.gov/assembly/GCA_017916855.1) |
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