|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Species** | **DNMT1** | **DNMT3** | **TET** | **MBD2/3** | **MBD4** |
| **Bivalvia** |
| *Archivesica marissinica* | NA | AMA38402 | NA | AMA25238 | AMA36082 |
| *Argopecten irradians irradians* | evm.model.Contig466.11 | evm.model.Contig132.71 | evm.model.Contig651.63 | evm.model.Contig465.30 | evm.model.Contig220.100 |
| *Argopecten purpuratus* | evm.model.scaffold\_12441.8 | evm.model.scaffold\_526.17 | evm.model.scaffold\_59948.90 | evm.model.scaffold\_741.25 | evm.model.scaffold\_294.16 |
| *Bathymodiolus platifrons* | Bpl\_scaf\_1905-3.3 | NA | Bpl\_scaf\_45827-0.6 | Bpl\_scaf\_49462-7.20 | Bpl\_scaf\_6373-13.12 |
| *Crassostrea gigas* | XP\_034303442.1 | XP\_011435620.2 | XP\_034314264.1 | XP\_011453189.1 | XP\_011447845.2 |
| *Crassostrea virginica* | XP\_022322197 | XP\_022319474 | XP\_022313682 | XP\_022329945 | XP\_022298882 |
| *Cyclina sinensis* | evm.model.Hic\_asm\_5.436 | evm.model.Hic\_asm\_6.1097 | evm.model.Hic\_asm\_0.1170.3 | evm.model.Hic\_asm\_16.144 | evm.model.Hic\_asm\_12.306 |
| *Dreissena rostriformis* | Gene.101952 | NA | Gene.42680 | Gene.143307 | Gene.63354 |
| *Limnoperna fortunei* | de novo assembled from PRJNA587212 | itr6\_2462\_pi.g2306.t1 | de novo assembled from PRJNA587212 | itr6\_1090\_pi.g1695.t1 | de novo assembled from PRJNA587212 |
| *Lutraria rhynchaena* | LRHYN\_00000414 | NA | NA | LRHYN\_00010563 | LRHYN\_00024172 |
| *Magallana hongkongensis* | NA | Mho\_044905-T1 | Mho\_044672-T1 | Mho\_039297-T1 | Mho\_035083-T1 |
| *Megalonaias nervosa* | NA | NA | NA | g180863.t1 | NA |
| *Mizuhopecten yessoensis* | XP\_021355294 | XP\_021367085 | XP\_021358786 | XP\_021360511 | XP\_021345640 |
| *Modiolus philippinarum* | NA | NA | NA | Mph\_scaf\_67416-0.7 | NA |
| *Mytilus coruscus* | de novo assembled from PRJNA375125 | CAC5368096.1 | CAC5424230.1 | de novo assembled from PRJNA375125 | CAC5409758.1 |
| *Mytilus galloprovincialis* | MGAL10A039860 | MGAL10A047994 | MGAL10A062978 | MGAL10A023395 | MGAL10A066139 |
| *Panopea generosa* | NA | NA | NA | PGEN\_.00g267290.m01 | PGEN\_.00g277500.m01 |
| *Pecten maximus* | XP\_033731221 | XP\_033735640 | XP\_033749207 | XP\_033749419 | XP\_033745690 |
| *Pinctada fucata* | Pma\_10012479 | NA | Pma\_10024812 | Pma\_10011890 | NA |
| *Ruditapes philippinarum* | GENE01773.1 | NA | GENE48409.1 | GENE89500.1 | GENE52820.1 |
| *Saccostrea glomerata* | Sgl021079 | Sgl006863 | Sgl008002 | Sgl009157 | Sgl010912 |
| *Scapharca broughtonii* | EVM0012958 | EVM0020580 | EVM0009030 | EVM0021479 | EVM0021229 |
| *Sinonovacula constricta* | evm.model.Chr18.98 | NA | evm.model.Chr1.1133.2 | evm.model.Chr5.431 | evm.model.Chr7.2339 |
| **Other Lophotrochozoa** |
| *Aplysia californica* | XP\_005095277.1 | NA | XP\_005092662.1 | XP\_005103642.1 | XP\_005091733.1 |
| *Biomphalaria glabrata* | XP\_013075419.1 | NA | XP\_013079909.1 | NA | XP\_013077001.1 |
| *Lingula anatina* | g4803.t1 | g21415.t1 | XP\_013410269.1 | XP\_013380854.1 | XP\_013386004.1 |
| *Lottia gigantea* | XP\_009045725.1 | NA | NA | NA | NA |
| *Pomacea canaliculata* |  PVD21741.1 | NA | XP\_025092856.1 | XP\_025077414.1/PVD20269.1 | XP\_025106324.1 |
| *Pomacea maculata* | NA | Pma\_649\_11.24 | NA | NA | NA |
| *Octopus bimaculoides* | XP\_014781622.1 | XP\_014770808.1 | NA | XP\_014790599.1 | XP\_014777552.1 |

**Supplementary Table 1:** Accession numbers of the mollusk proteins considered in this work.