

Appendix 2-1

Chapter 2. Exploiting genomic data to identify proteins involved in abalone reproduction.

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“Genetic information from several molluscan species (supplementary information 6) was used to build the customised database utilised in this study. Contigs, mRNA, SRA, ESTs sequences and transcriptome assemblies were downloaded from different public sources. SRA reads were assembled *de novo* into contigs using MIRA 3.4.0[€]. ESTs, mRNA or transcriptome assemblies were used directly to detect open reading frames (ORFs) using the getorf application. EMBOSS[¥] suite default parameters were applied to obtain the ORFs . For each sequence the longest ORF was kept and collated into the customised molluscan database”.

Table 3. Sources of genetic information used to assemble the molluscan database utilised in this study

Molluscan specie	Source/reference
<i>Haliotis asinina</i>	Jackson et al. 2010 ^[1]
<i>Pinctada maxima</i>	Jackson et al. 2010 ^[1]
<i>Haliotis midae</i>	Franchini et al. 2011 ^[2]
<i>Littorina saxatilis</i>	Galindo et al. 2010 ^[3]
<i>Crepidula fornicata</i>	Henry et al. 2010 ^[4]
<i>Ilyanassa obsoleta</i>	Lambert et al. 2010 ^[5]
<i>Lymnaea stagnalis</i>	Feng et al. 2009 ^[6]
<i>Littorina saxatilis</i>	EBI (http://www.ebi.ac.uk) accession (FR863689–FR864978)
<i>Biomphalaria glabrata</i>	http://www.snaildb.org/
<i>Aplysia californica</i>	http://hgdownload.cse.ucsc.edu/goldenPath/aplCal1/bigZips/
<i>Mytilus galloprovincialis</i>	http://mussel.cribi.unipd.it/
<i>Crassostrea gigas</i>	http://www.genoscope.cns.fr/spip/crassostrea-gigas-EST-library.html
<i>Lottia gigantea</i>	http://genome.jgi-psf.org/Lotgi1/Lotgi1_home.html
<i>Littorina saxatilis</i>	http://mbio-serv2.mbioekol.lu.se/Littorina/
<i>Dreissena polymorpha</i>	http://www.nematodes.org/NeglectedGenomes/MOLLUSCA/wwwMolluscDB_blast.html

<i>Mytilus edulis</i>	http://www.nematodes.org/NeglectedGenomes/MOLLUSCA/wwwMolluscDB_blast.html
<i>Crassostrea virginica</i>	http://www.nematodes.org/NeglectedGenomes/MOLLUSCA/wwwMolluscDB_blast.html
<i>Argopecten irradians</i>	http://www.nematodes.org/NeglectedGenomes/MOLLUSCA/wwwMolluscDB_blast.html
<i>Biomphalaria glabrata</i>	http://www.nematodes.org/NeglectedGenomes/MOLLUSCA/wwwMolluscDB_blast.html
<i>Crassostrea, gigas</i>	http://www.nematodes.org/NeglectedGenomes/MOLLUSCA/wwwMolluscDB_blast.html
<i>Lymnaea stagnalis</i>	http://www.nematodes.org/NeglectedGenomes/MOLLUSCA/wwwMolluscDB_blast.html

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- Tools for contigs and ORF files creation.

€. <http://sourceforge.net/p/mira-assembler/wiki/Home/>

¥. <http://emboss.sourceforge.net/>