**Supplementary Material**

**Phylogenetic position and relationships amongst fish studied.**  A) Cladistic representation of the phylogeny of damselfishes of the genus *Stegastes*, with the Sergeant Major, *Abudefduf saxatilis*, as outgroup. This tree is based on mitochondrial sequences and was a personal communication from H.A. Lessios of the Smithsonian Tropical Research Institute. B) Order to Superorder level cladistic view of the phylogenetic relationships between species in this study. Number of currently described species follows each taxonomic group, followed by a representative common name in parentheses. This tree was adapted from that of John G. Lundberg on the Teleostei page of the Tree of Life web project (Carrol RH 1988, Nelson JS 1994).

### Table 1. Substituted amino acids at polymorphic positions: Zebrafish

<table>
<thead>
<tr>
<th>Position&lt;sup&gt;a)&lt;/sup&gt;</th>
<th>A.A.</th>
<th>Class shift&lt;sup&gt;b)&lt;/sup&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Q/K</td>
<td>P/+</td>
</tr>
<tr>
<td>25</td>
<td>E/V</td>
<td>-/H</td>
</tr>
<tr>
<td>29*</td>
<td>S/T</td>
<td>P/P</td>
</tr>
<tr>
<td>30*</td>
<td>G/D</td>
<td>G/-</td>
</tr>
<tr>
<td>33*</td>
<td>L/H</td>
<td>H/P</td>
</tr>
<tr>
<td>34*</td>
<td>K/E</td>
<td>+/-</td>
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<tr>
<td>45</td>
<td>S/N</td>
<td>P/P</td>
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<td>50*</td>
<td>F/L</td>
<td>H/H</td>
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<tr>
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<td>S/G</td>
<td>P/G</td>
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<td>N/Y/D</td>
<td>P/P/-</td>
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<td>S/L</td>
<td>P/H</td>
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<tr>
<td>74</td>
<td>R/K</td>
<td>+/-</td>
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<sup>a)</sup>Amino acids in Fig. 1 numbered sequentially, asterisks denote residues predicted to be in the c-d loop, e-f loop and f strand.

<sup>b)</sup>positive charge, +; negative charge, -; hydrophobic, H; polar, P; glycine, G.
Table 2. Substituted amino acids at polymorphic positions: Atlantic cod

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<td>H/P</td>
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<td>D/Y</td>
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a) Amino acids in Fig. 2 numbered sequentially, asterisks denote residues predicted to be in the c-d loop, e-f loop and f strand.

b) Positive charge, +; negative charge, −; hydrophobic, H; polar, P; glycine, G.
Table 3. Isoelectric points of deduced amino acid sequences. The EMBL web server was used to calculate isoelectric points based on C, D, E, H, K, R and Y residues and the two termini. Clone designations are as shown in Figures 1 and 2.

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<th>Zebrafish</th>
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<th>Isoelectric Point</th>
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