

## Data S1

### Accession numbers of the GPCR sequences used to build the multiple sequence alignments analyzed by MDS

The accession numbers correspond to the UniProtKB accession numbers except for the sequences from *C. Intestinalis* with references CI0xxxxxx. They correspond to the sequences reported by Fredriksson et al. (2005) under the references lcl|ci0100xxxxxx.

#### *H. sapiens*

000155 O00254 O00270 O00398 O00421 O00574 O00590 O14626 O14718 O14804  
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#### *D. rerio*

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### *C. intestinalis*

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### *C. elegans*

#### Human sub-families

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#### Non-human sub-families

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Q22305 Q9N476 YT66 Q18876 Q18816 Q9U320 Q18923 O45173 Q9GYH2 Q18929  
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### *N. vectensis*

#### Human sub-families

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#### Non-human sub-families

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