

Figure S1

<i>C. elegans</i> SER-2	L V M V V V Y V	K I F I S A	R ²⁴⁵ Q R ²⁴⁷	I R T T R
<i>D. melanogaster</i> Oct-TyrR	A I M T I V Y I	E I F V A T	R R R	L R E R A
<i>A. mellifera</i> TYR1	L L M S L V Y L	E I Y L A T	R R R	L R E R A
<i>P. americana</i> PeaTAR1B	F I M T I V Y V	E I F M A T	R R R	L R E R A
<i>H. sapiens</i> 5HT-1A	L L M L V L Y G	R I F R A A	R F R	I R K T V
<i>C. elegans</i> TYRA-2	F F V Y F K I Y	Q A F A K H	R A R	Q I Y R Q

TM V

Figure S1. Related receptors from multiple phyla contain a putative methylation motif. Alignment showing conservation of the predicted arginine methylation motifs of the *C. elegans* (SER-2), *D. melanogaster* (Oct-TyrR), *A. mellifera* (TYR1), *P. americana* (PeaTAR1B), *H. sapiens* (5HT-1A) and *C. elegans* (TYRA-2) receptors. Residues Arg245 and Arg247 of SER-2 (indicated) lie within a conserved RXR motif, in which X can be any amino acid residue. The gray shading indicates the end of transmembrane domain five (TM V) of the receptors.