



**Figure S6.**

**Figure S6.** Phylogenetic reconstruction of RXFP1/2 proteins from vertebrates, protochordates and an echinoderm. All of the amphioxus rxfp1/2-like proteins cluster closely to vertebrate RXFP1/2's and RXFP2-like sequences, while two of the 27 sea urchin rxfp1/2-like proteins are found in a clade with fruit fly lgr3 and lgr4 in another sister clade to RXFP1/2-like genes. The *Ciona* rxfp1/2-like genes appear distantly related to the entire protostome-deuterostome RXFP1/2 cluster. Fruit fly lgr3 (FBgn0039354) and lgr4 (FBgn0085440) genes were obtained from Ensembl Metazoa (<http://www.metazoa.ensembl.org>).