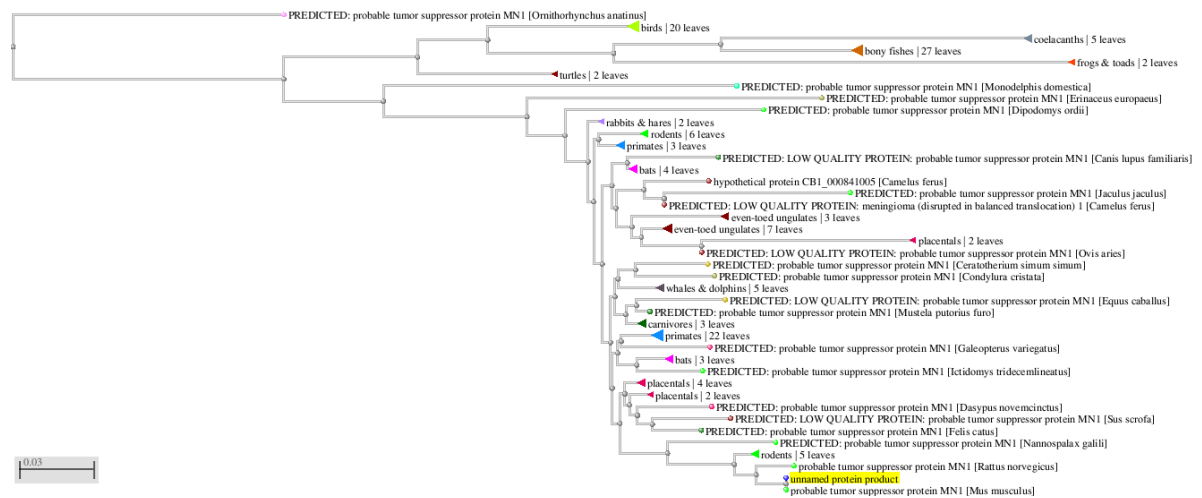
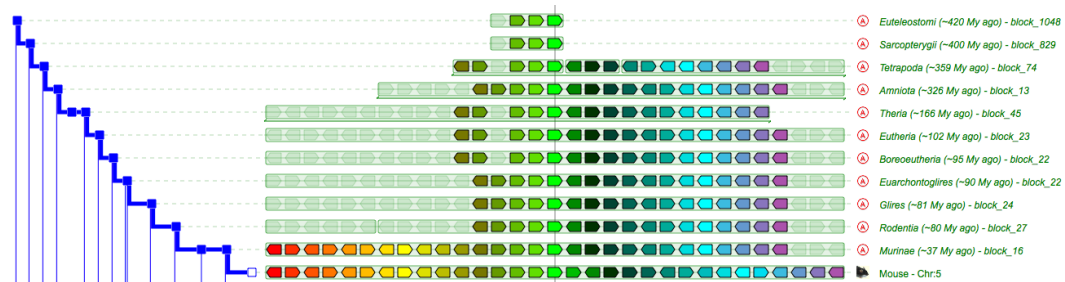


**a**



**b**



**Figure S12. Origin of Mn1 at the base of Euteleostomi.** (a) Using PSI-BLAST at NCBI ([http://blast.ncbi.nlm.nih.gov/Blast.cgi?CMD=Web&PAGE\\_TYPE=BlastHome](http://blast.ncbi.nlm.nih.gov/Blast.cgi?CMD=Web&PAGE_TYPE=BlastHome)) with 3 iterations and a threshold of 0.005 (low complexity filter activated), no matches were found beyond bony fish. (b) Using genomic context analysis with Genomicus (<http://www.genomicus.biologie.ens.fr/genomicus-81.01/cgi-bin/search.pl>) hits were detected only in Euteleostomi