

Figure S1A. FTO, fat mass and obesity associated gene (ENSG00000140718)

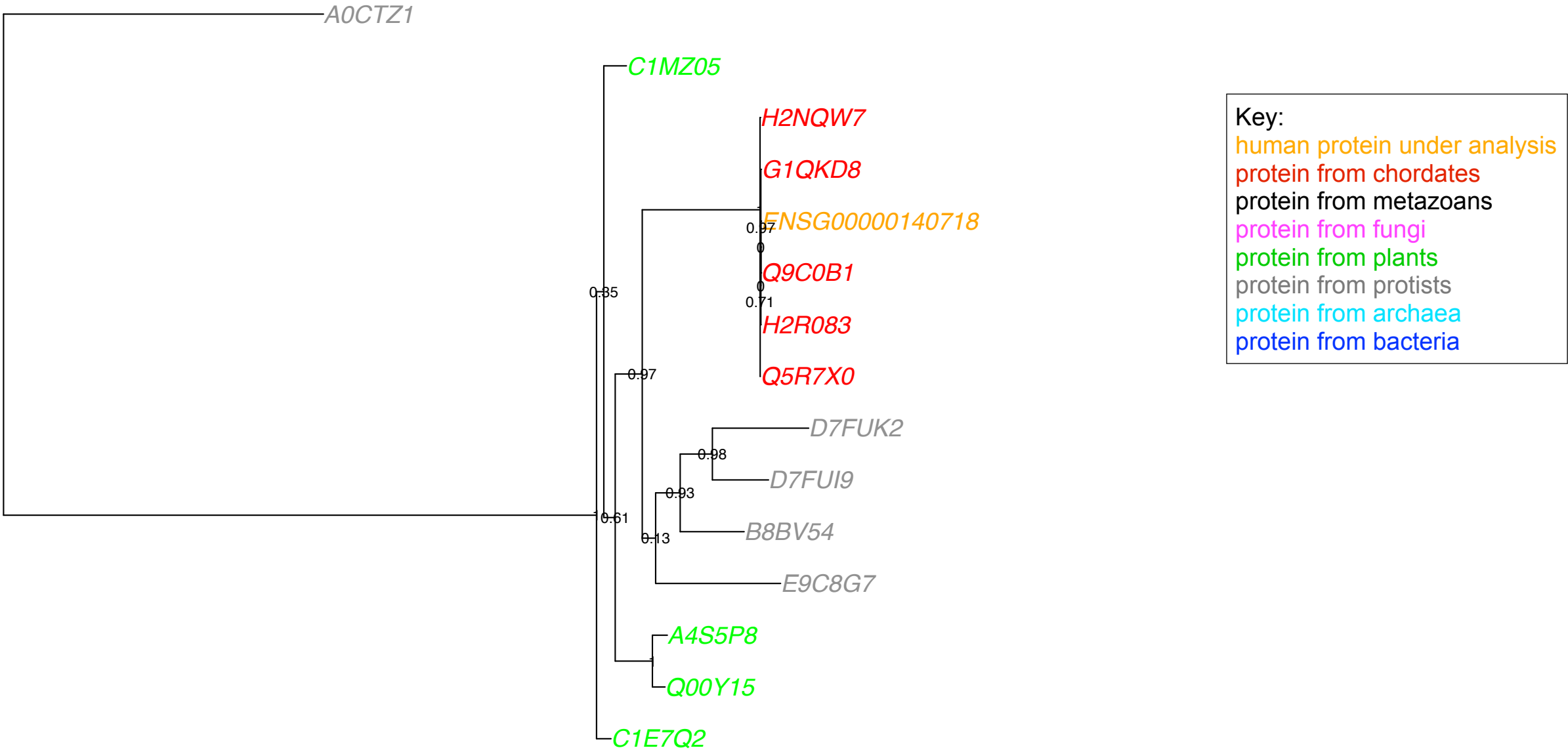


Figure S1B. ABO, transferase A, alpha 1-3-N-acetylgalactosaminyltransferase; transferase B, alpha 1-3-galactosyltransferase (ENSG00000256062)

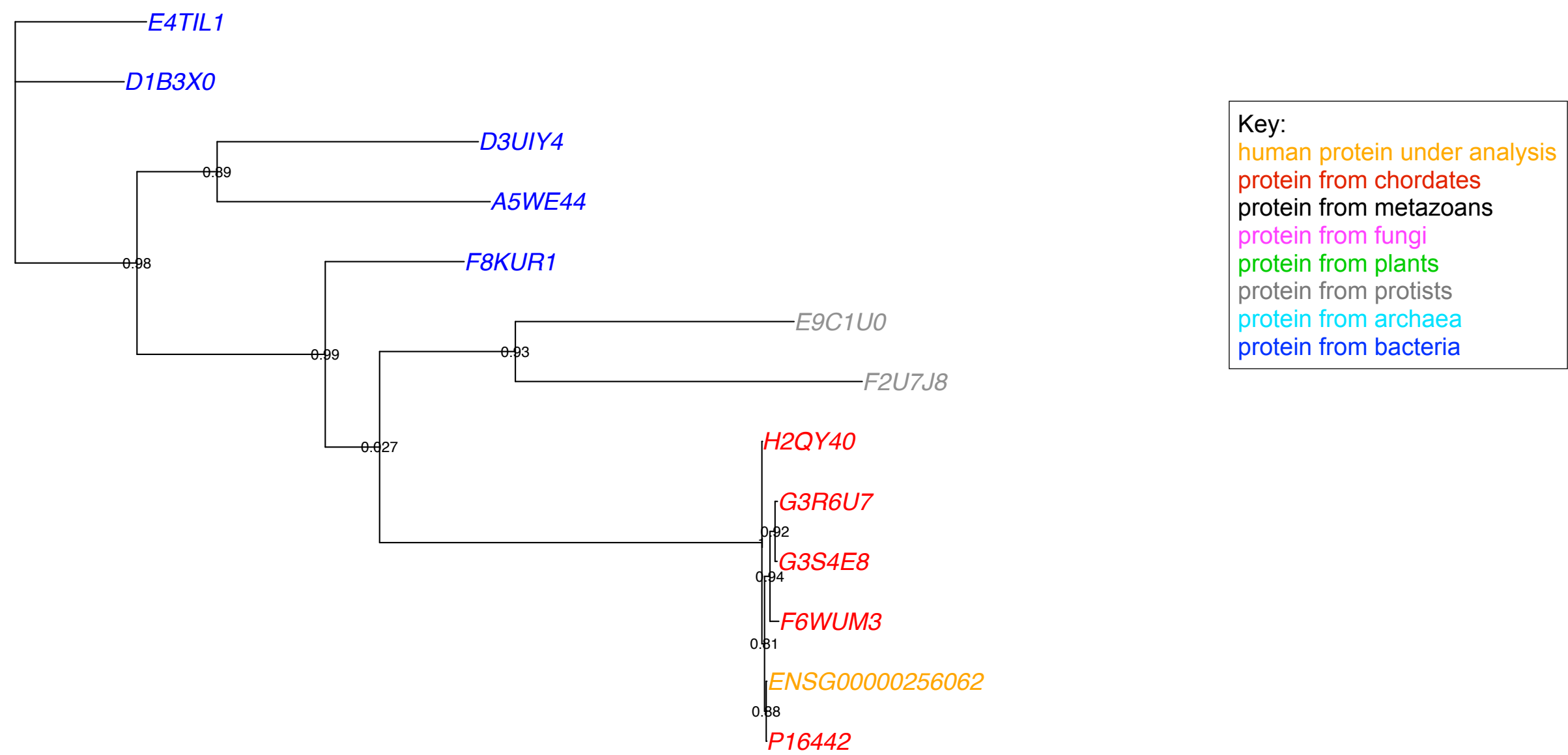


Figure S2.

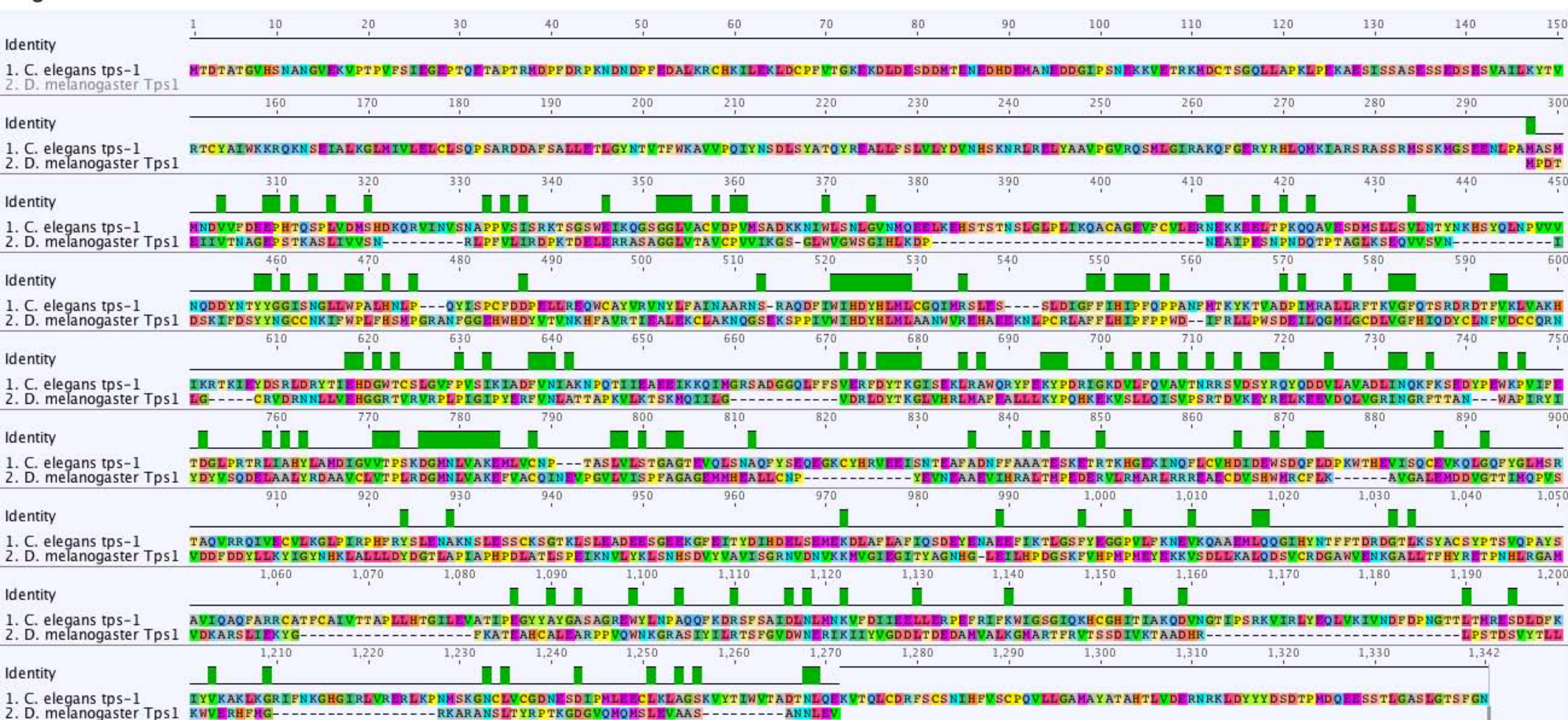
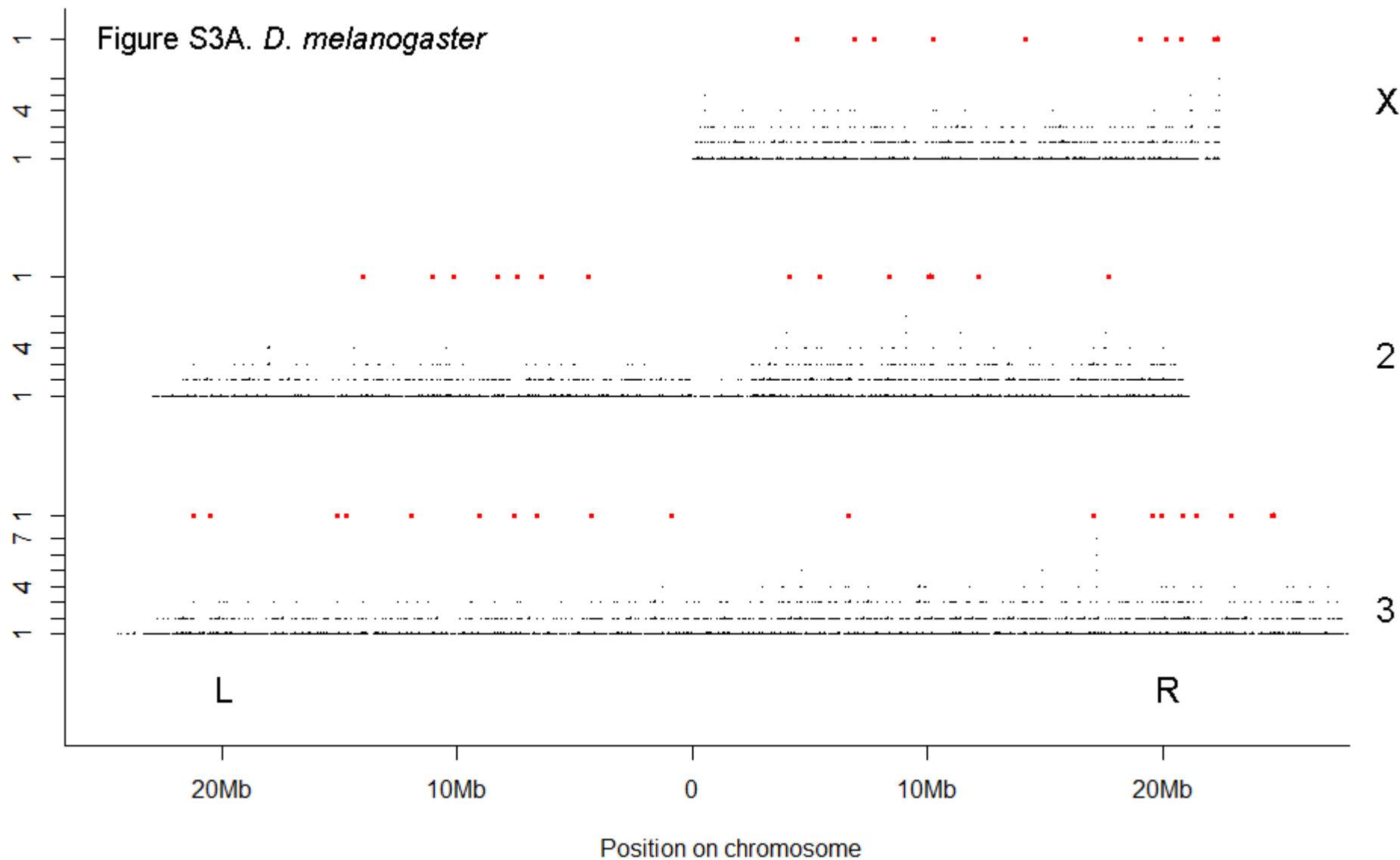


Figure S3A. *D. melanogaster*

Number of overlapping genes



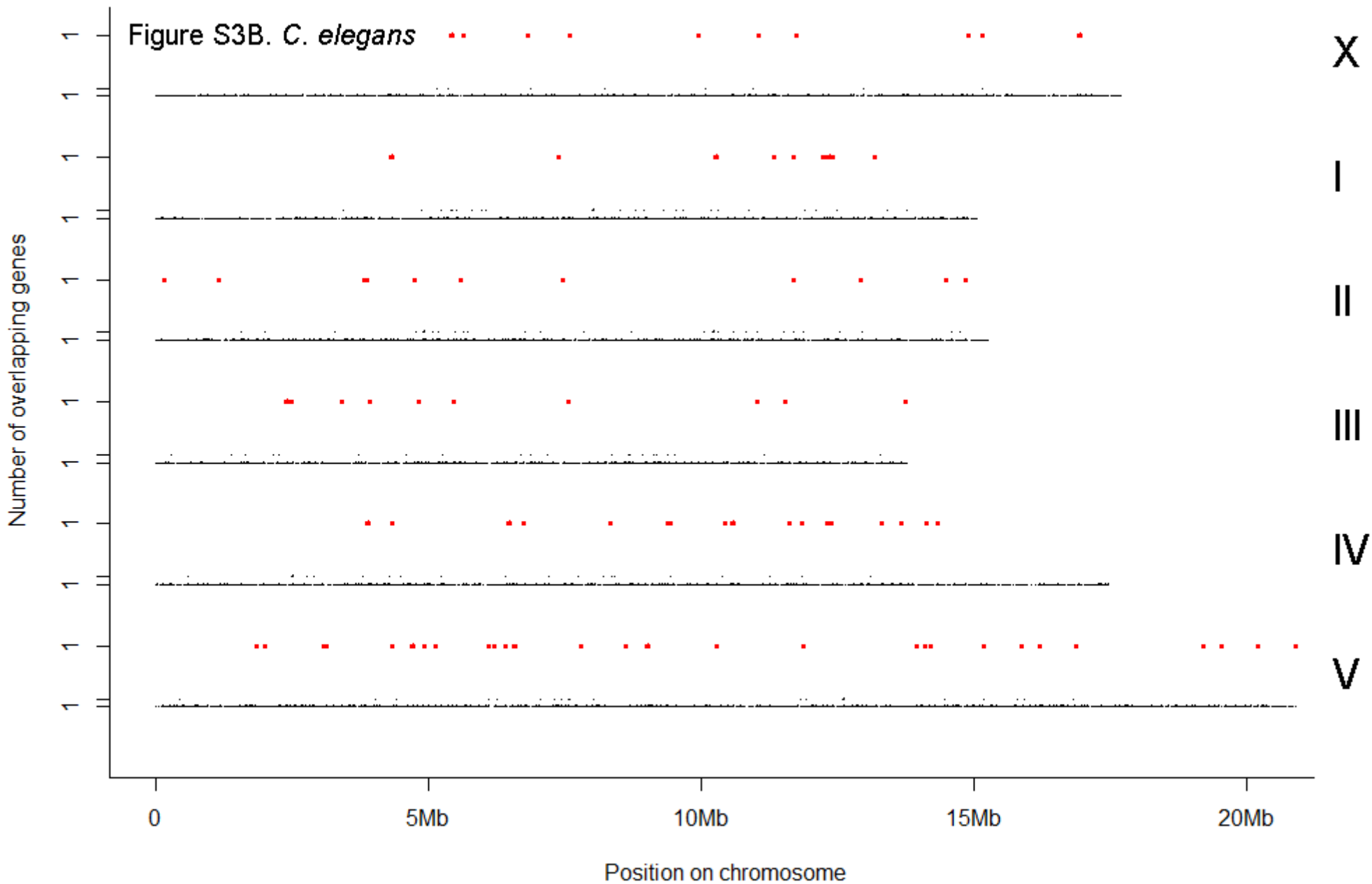


Figure S4.

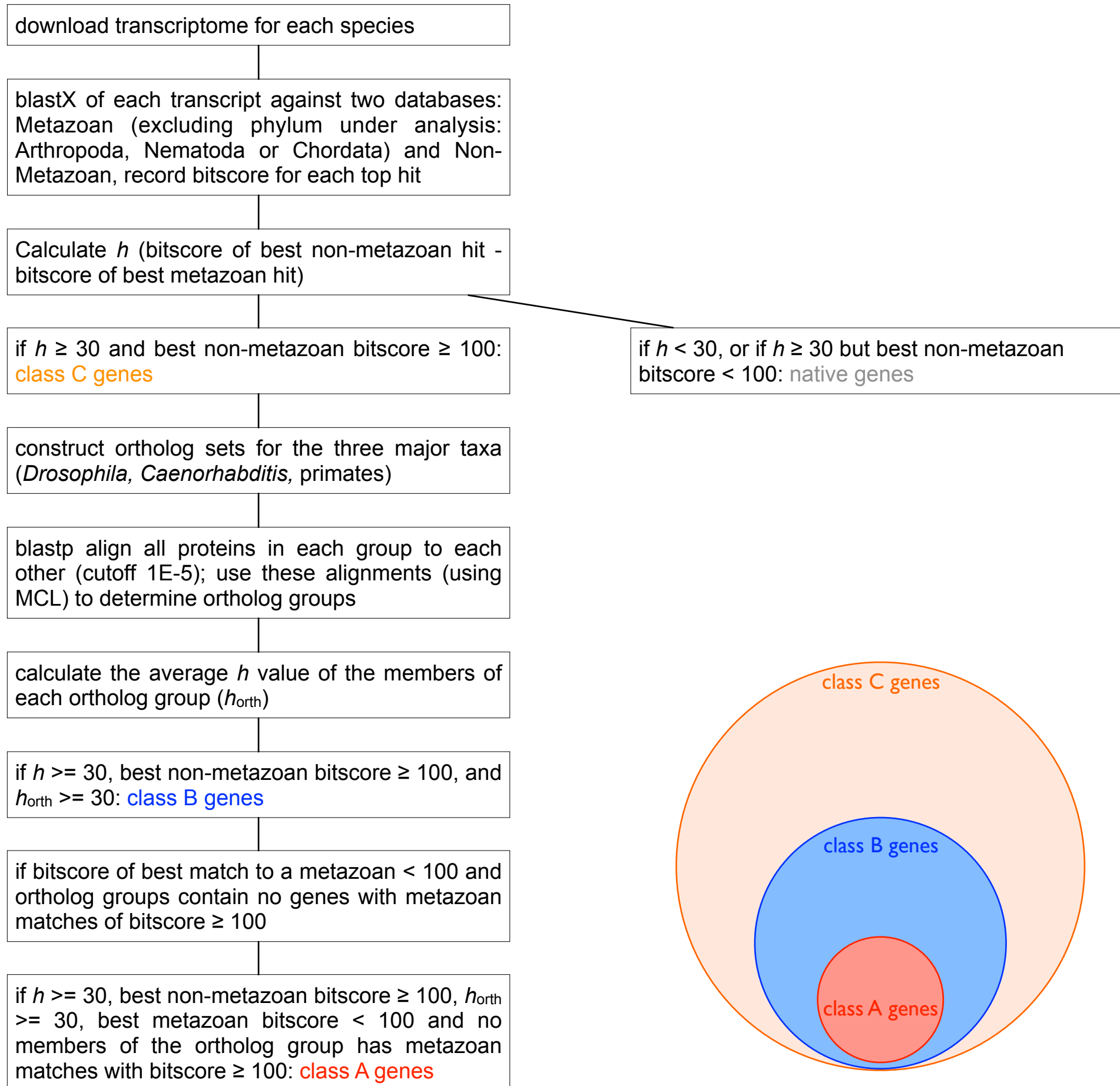
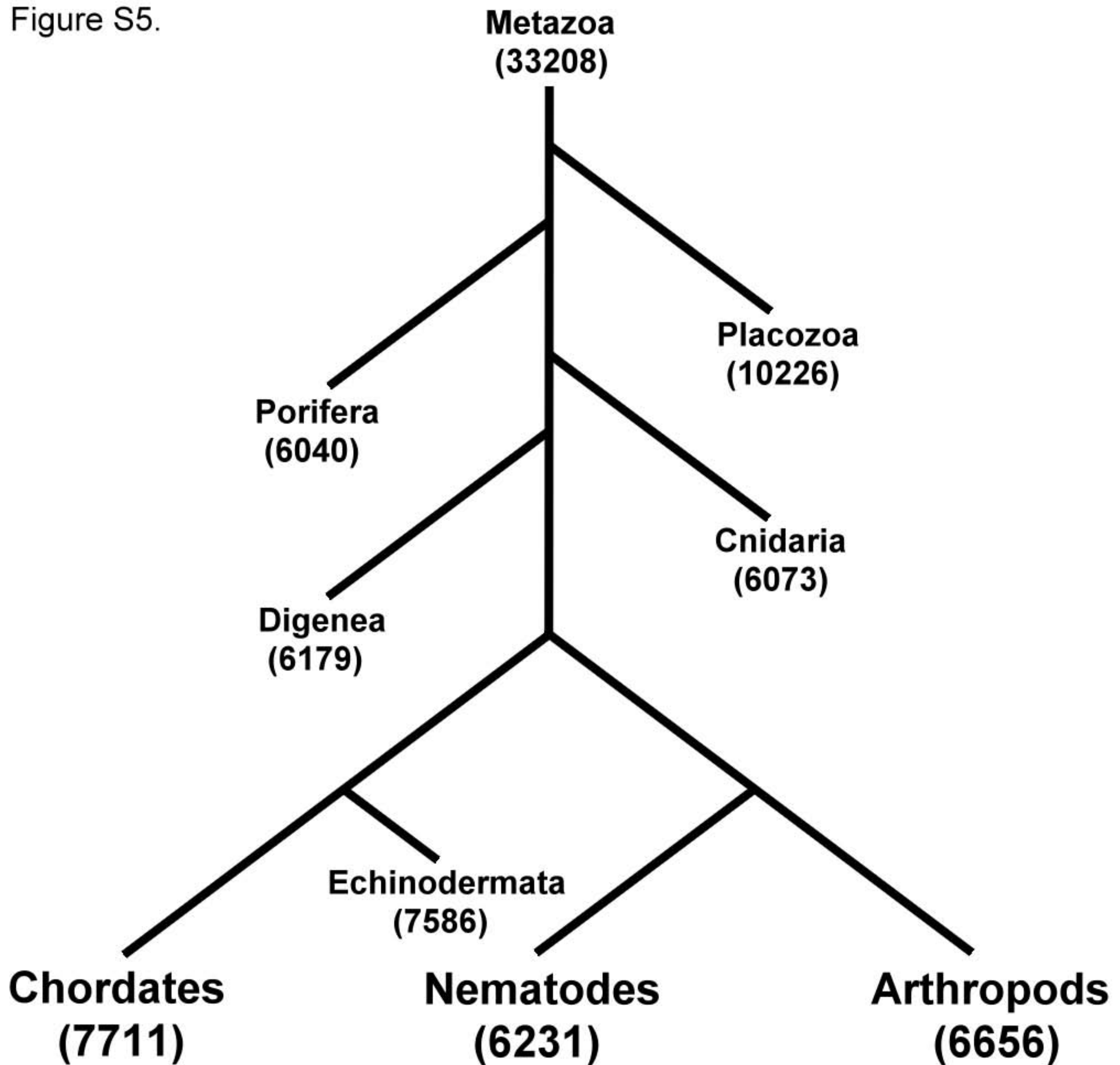


Figure S5.



Key:

- human protein under analysis
- protein from chordates
- protein from metazoans
- protein from fungi
- protein from plants
- protein from protists
- protein from archaea
- protein from bacteria

* removed from UniProt since analyses



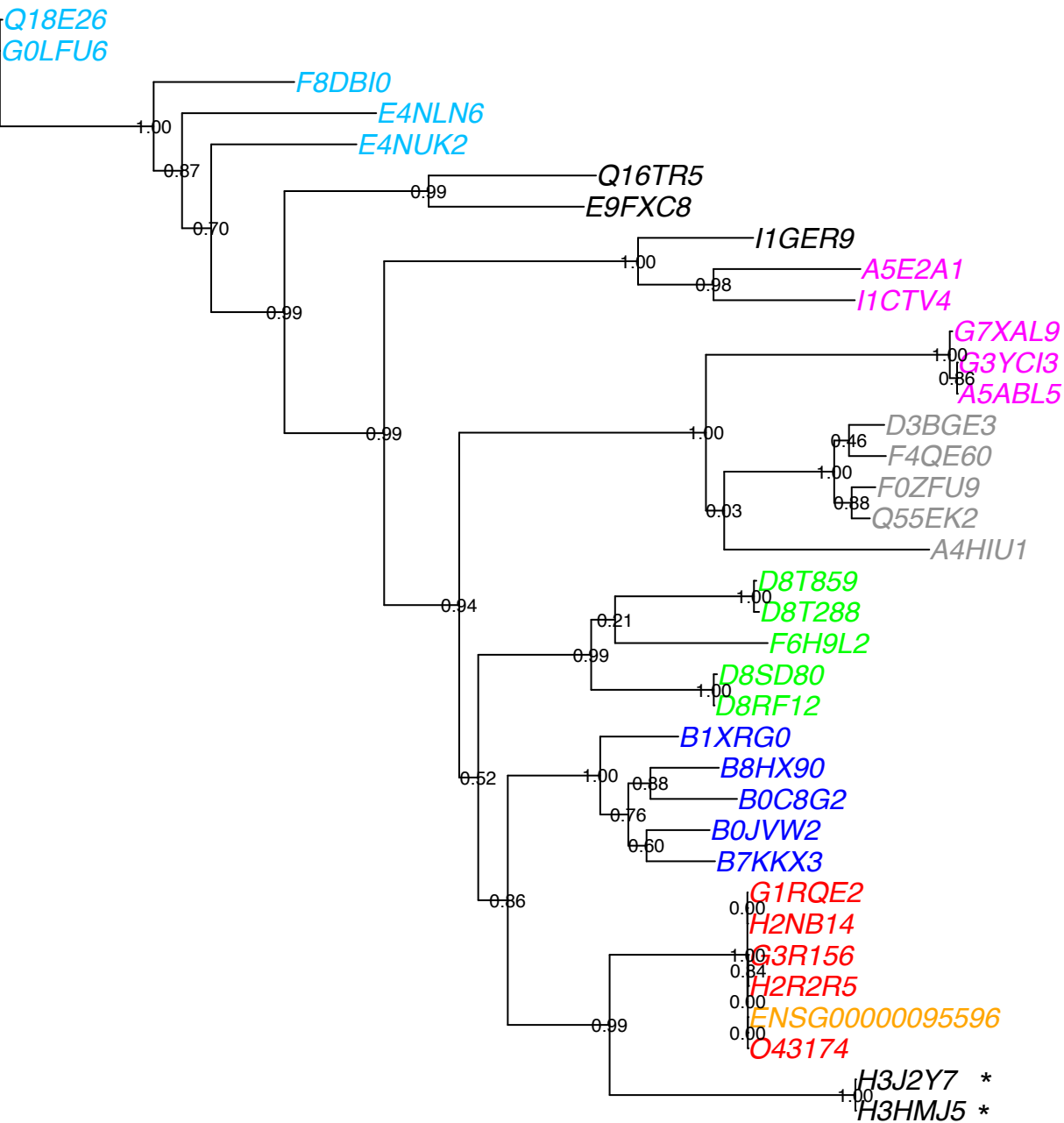
Phylogenetic tree excluding the contaminated genomes

Figure S6B. CYP26A1, cytochrome P450, family 26, subfamily A, polypeptide 1 (ENSG00000095596)

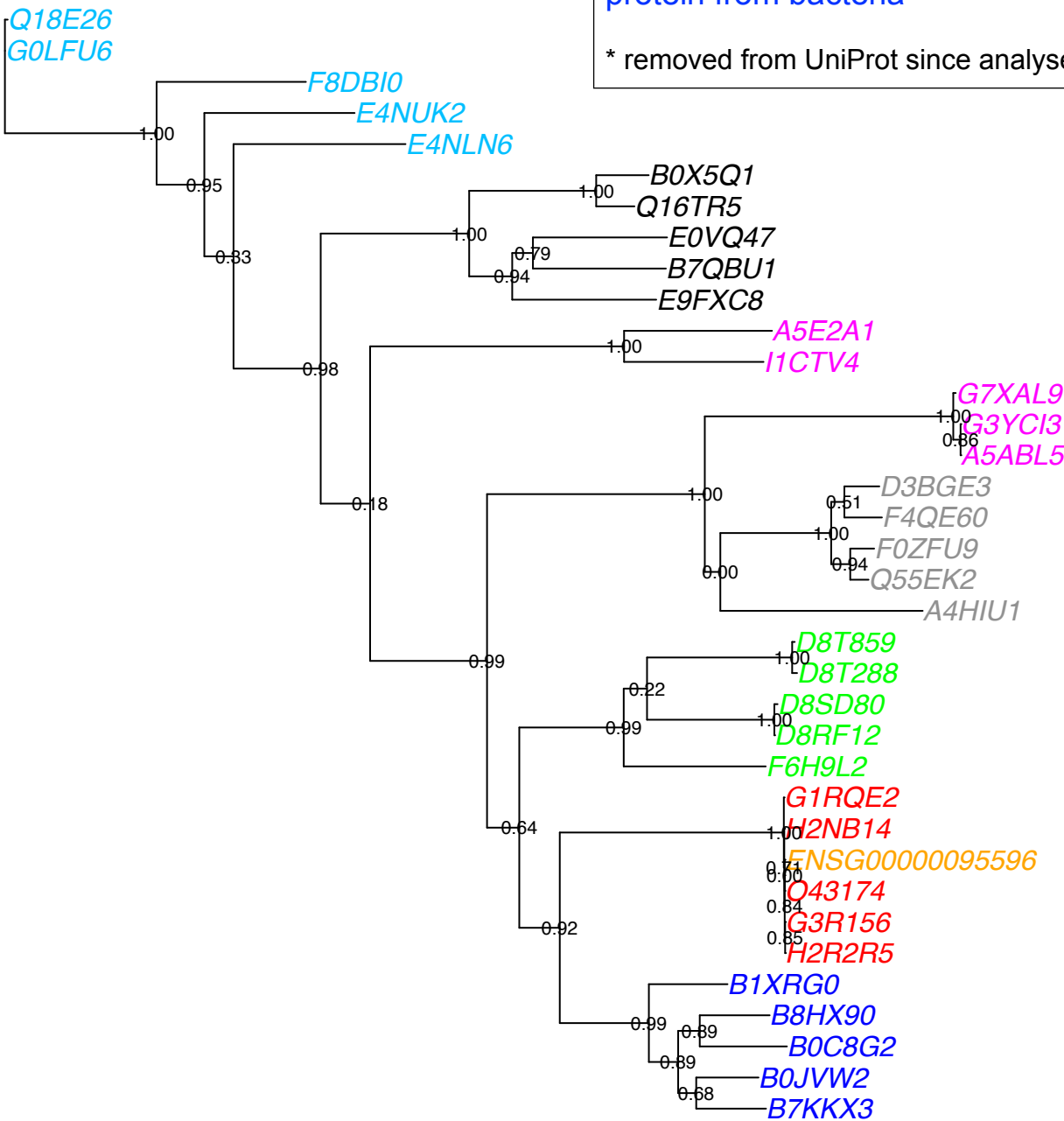
Key:

- human protein under analysis
- protein from chordates
- protein from metazoans
- protein from fungi
- protein from plants
- protein from protists
- protein from archaea
- protein from bacteria

* removed from UniProt since analyses



Phylogenetic tree including the contaminated genomes



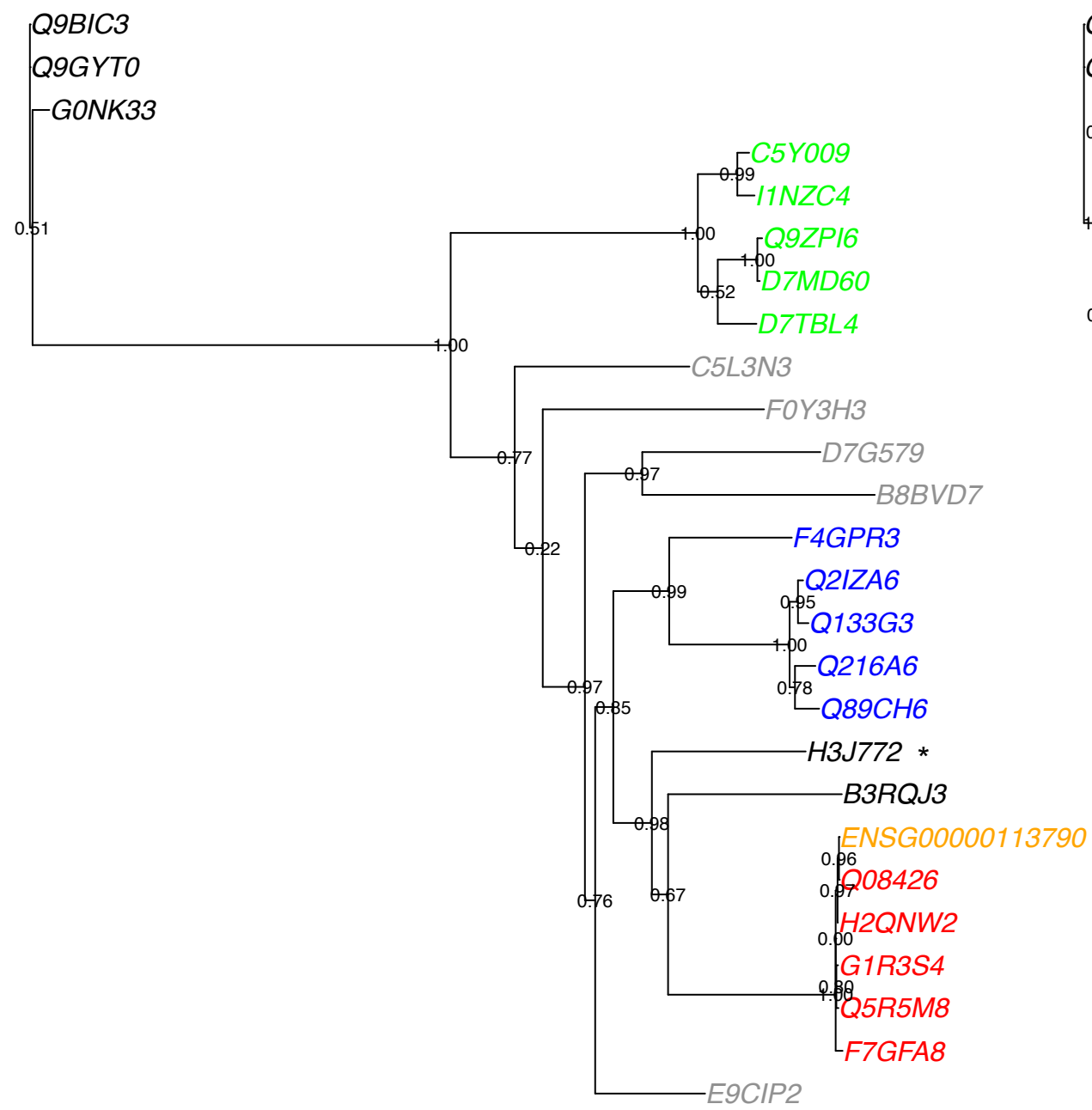
Phylogenetic tree excluding the contaminated genomes

Figure S6C. EHHADH, enoyl-CoA, hydratase/3-hydroxyacyl CoA dehydrogenase (ENSG00000113790)

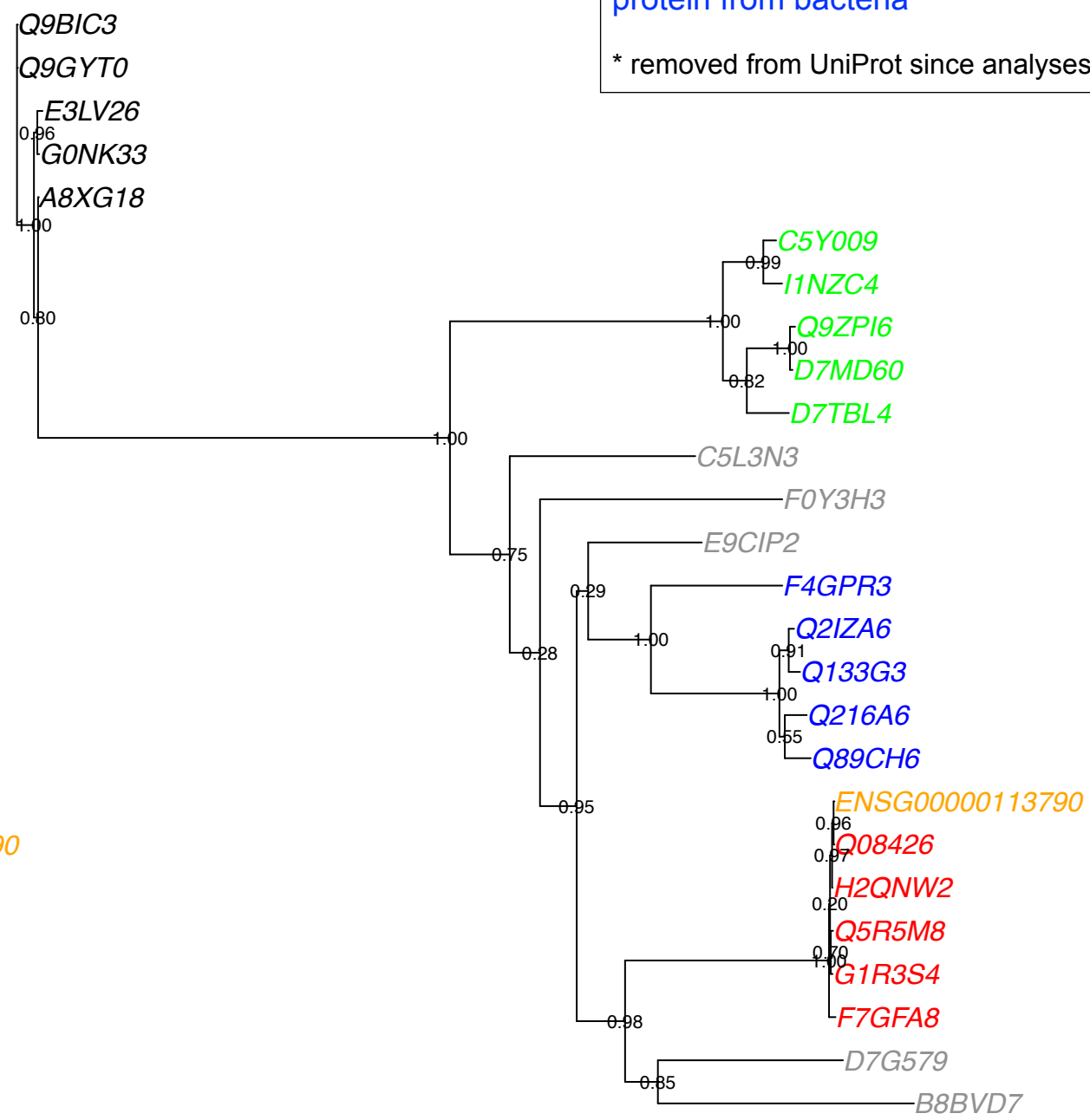
Key:

- human protein under analysis
- protein from chordates
- protein from metazoans
- protein from fungi
- protein from plants
- protein from protists
- protein from archaea
- protein from bacteria

* removed from UniProt since analyses

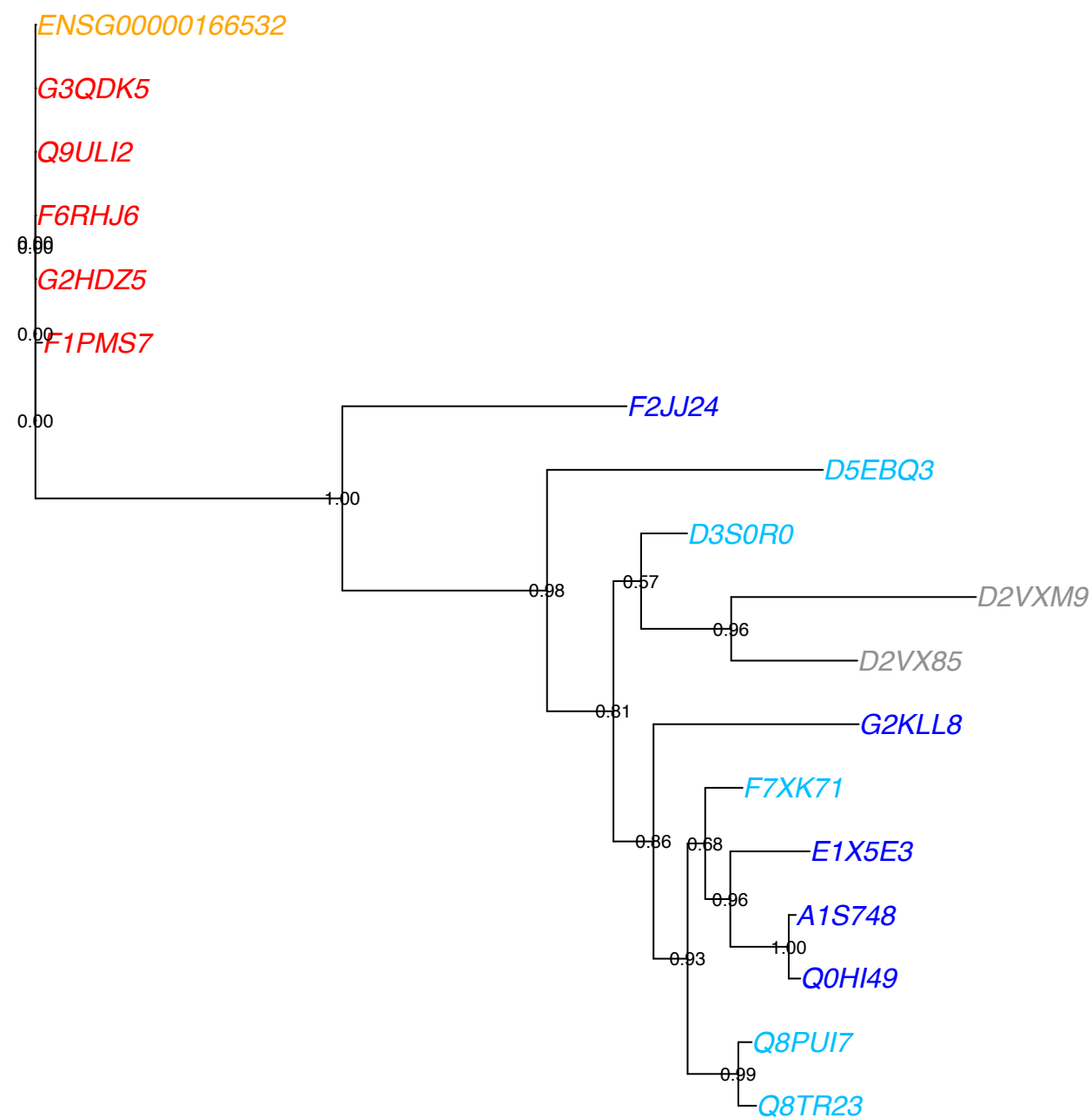


Phylogenetic tree including the contaminated genomes



Phylogenetic tree excluding the contaminated genomes

Figure S6D. RIMKLB, ribosomal modification protein rimK-like family member B (ENSG00000166532)



Phylogenetic tree including the contaminated genomes

Key:

- human protein under analysis
- protein from chordates
- protein from metazoans
- protein from fungi
- protein from plants
- protein from protists
- protein from archaea
- protein from bacteria

* removed from UniProt since analyses

no hits from contaminated genomes

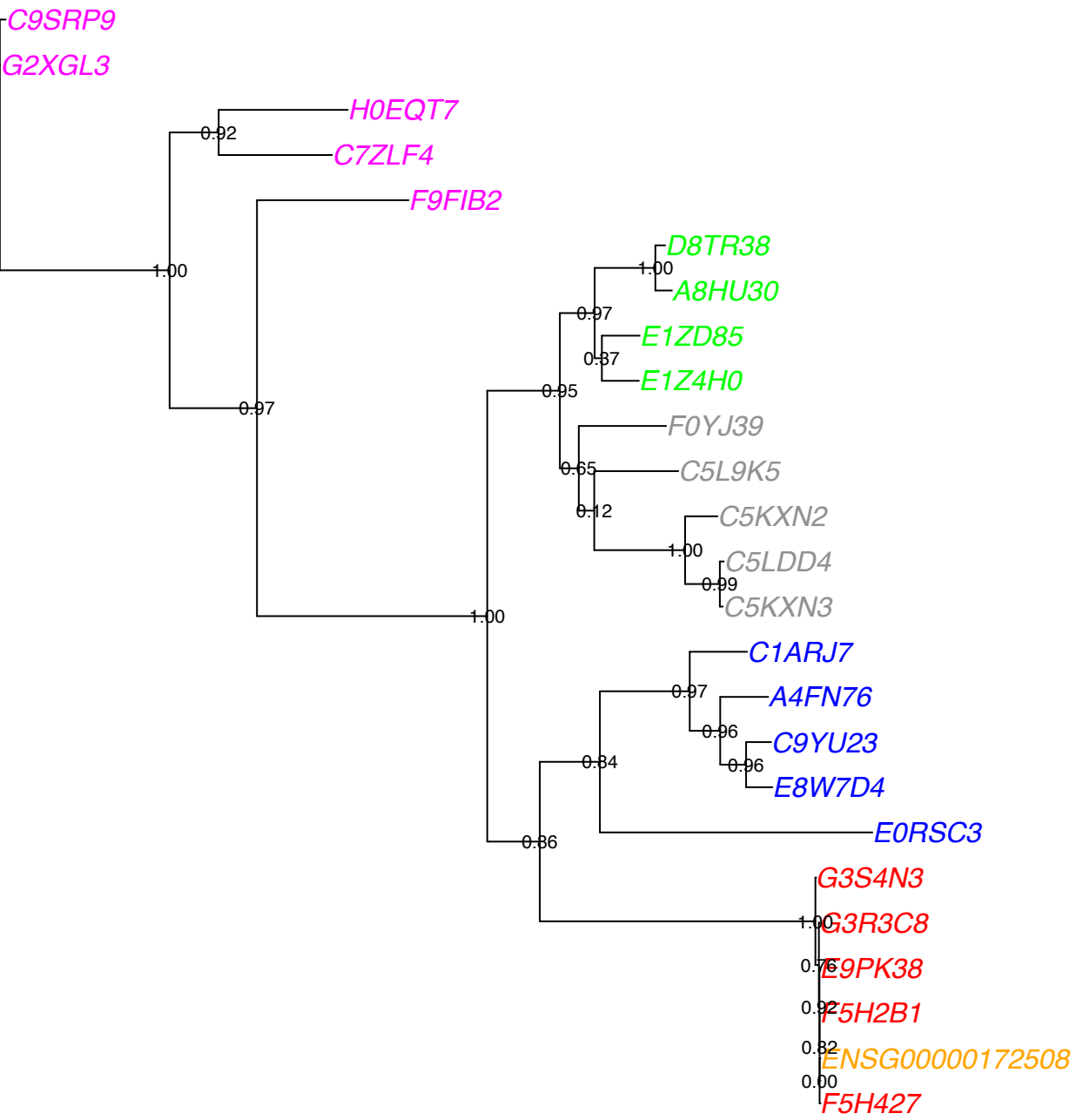
Phylogenetic tree excluding the contaminated genomes

Figure S6E. CARSN1, carnosine synthase 1 (ENSG00000172508)

Key:

- human protein under analysis
- protein from chordates
- protein from metazoans
- protein from fungi
- protein from plants
- protein from protists
- protein from archaea
- protein from bacteria

* removed from UniProt since analyses



no hits from contaminated genomes

Phylogenetic tree including the contaminated genomes

Phylogenetic tree excluding the contaminated genomes

Figure S6F. ACSM5, acyl-CoA synthetase medium-chain family member 5 (ENSG00000183549)

Key:

human protein under analysis

protein from chordates

protein from metazoans

protein from fungi

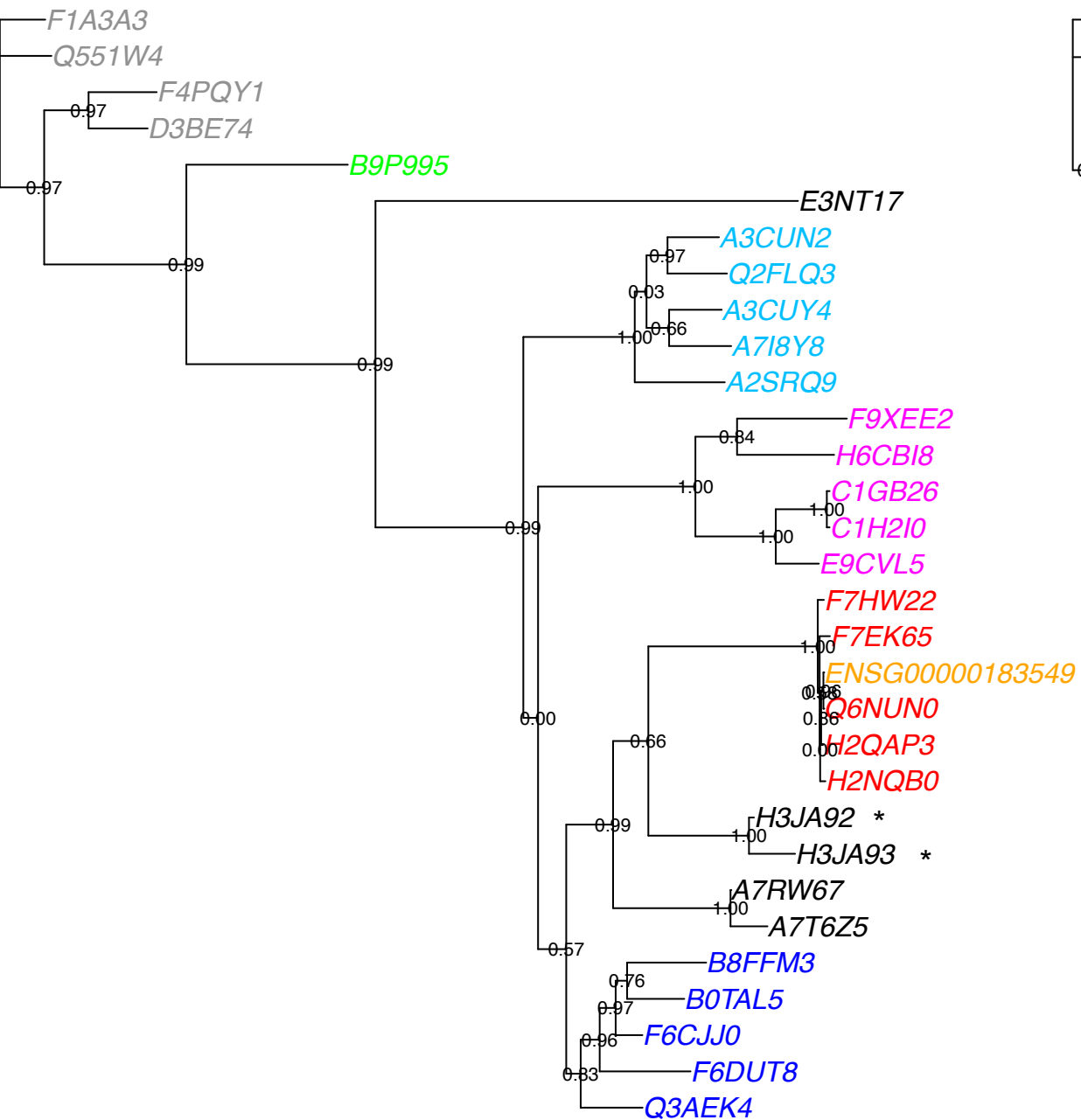
protein from plants

protein from protists

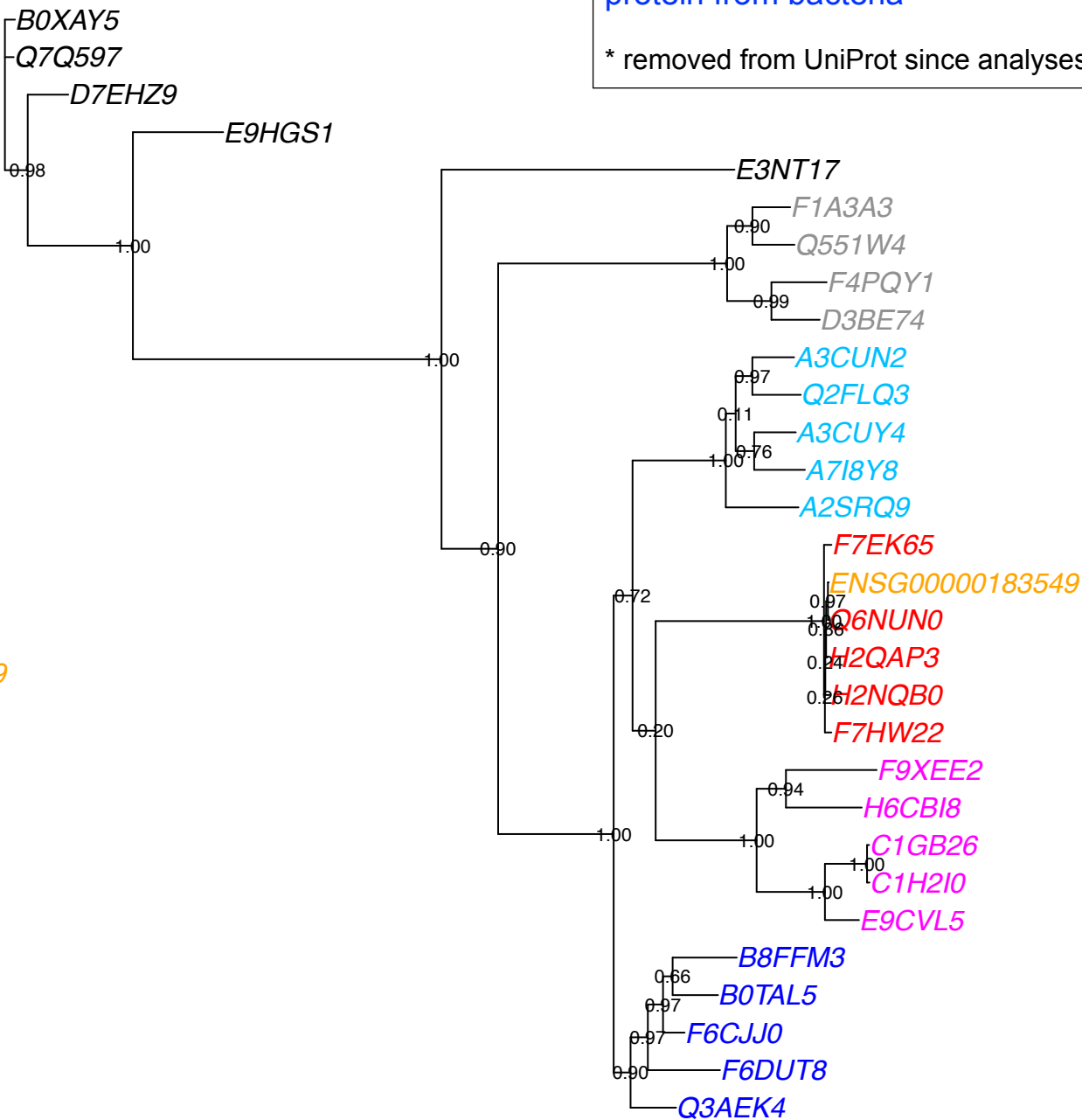
protein from archaea

protein from bacteria

* removed from UniProt since analyses



Phylogenetic tree including the contaminated genomes



Phylogenetic tree excluding the contaminated genomes