

Supplementary Information Guide to the manuscript:

Early Pleistocene enamel proteome sequences from Dmanisi resolve *Stephanorhinus* phylogeny

Two supplementary information files are linked to this manuscript:

1. Document title: Extended Methods and Results
Description: Detailed description, enriched with figures and tables, of: (i) the studied specimens, (ii) the experimental procedures used to generate the data, and (iii) the results, both positive and negative, supporting the conclusions reported in the main text.
2. Document title: Key MS2 Spectra
Description: Selection of automatically and manually annotated tandem MS/MS spectra, retrieved from Dmanisi ~1.77 Ma old specimens as well as synthetic peptides, supporting the identification of: (i) phylogenetically informative amino acid positions observed in specimen Dm.5/157-16635, and (ii) phosphorylated sites.