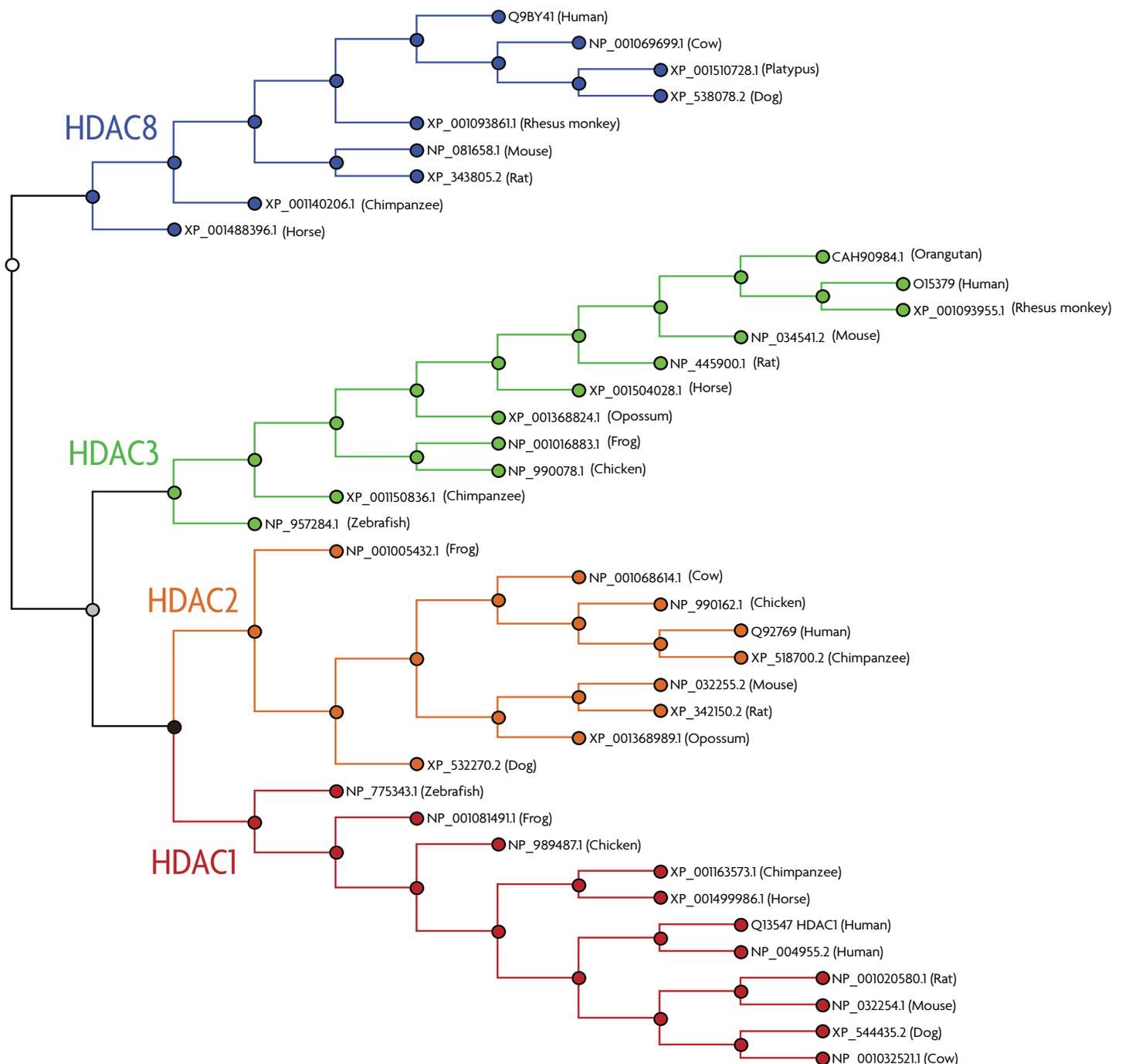


Class I & II HDAC Enzyme Phylogeny

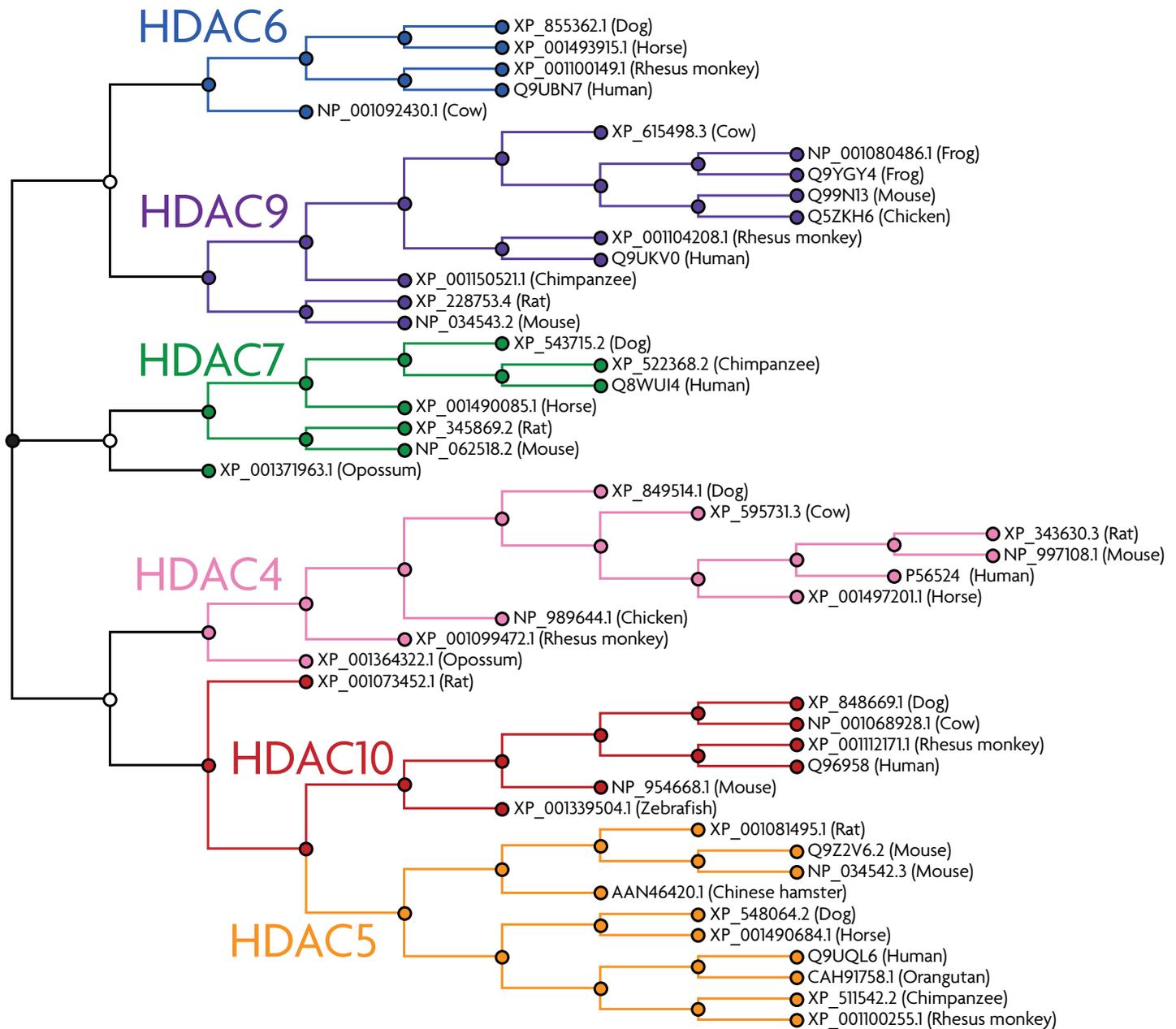
constructing phylogenetic relationships of HDACs from molecular sequences in vertebrates

Here are shown phylogenies of the two classical HDAC classes across vertebrate species. The classical HDAC enzymes fall into two phylogenetic classes, Class I and II. The Class I enzymes are HDAC1, 2, 3 & 8 and are typically found in the nucleus where they can repress transcription. The Class II enzymes, HDAC4, 5, 6, 7, 9 & 10, are able to move between the cytoplasm and nucleus to function in signal transduction.

Class I HDAC enzyme phylogeny



Class II HDAC enzyme phylogeny



Active Motif's HDAC Assay Kits are easy, sensitive assays to determine the activity of Class I and II HDAC enzymes. Please visit www.activemotif.com for more information about our kits and related HDAC antibodies.

METHODS

Sequence alignment and phylogenetic tree generation were created using Geneious Pro software from Biomatters.

Product	Format	Catalog No.
HDAC Assay Kit (Fluorescent)	1 x 96 rxns	56200
HDAC Assay Kit (Colorimetric)	1 x 96 rxns	56210