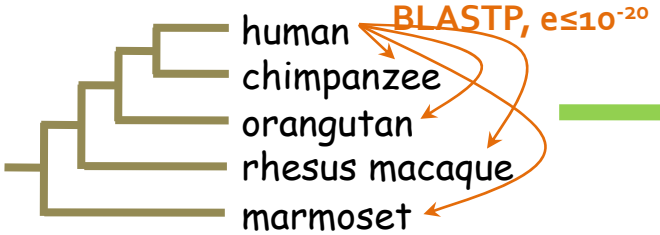

892 genes in the human have no blast hit in others

Excluding genes without Start or End codons

741 Human cDNA sequences to BLAT against chimpanzee, orangutan, genomes to obtain the homolog sequences

Non-human sequences contain frame-shift, and premature stop codons, or no start codon

139 genes

Human contains specific mutations, and the site is conserved in other primates

90 genes

Query PRIDE and PeptideAtlas database to search matched peptides

BLASTN nr database to search matched expressed mRNA sequences, and BLASTN EST database

53 De novo-originated human protein coding genes

Excluding genes with the same location as genes identified in Fig.1

33 De novo-originated human protein coding genes