Orthologs
Two genes in the same genome that are a product of a gene duplication event of the original gene

Paralogs
Two genes in two different species that share a common ancestor

Orthologs vs. Paralogs genes

Homologs
paralogs
orthologs
orthologs

frog α chick α mouse α mouse β chick β frog β

α-chain gene β-chain gene

GENE DUPLICATION
Early Gene of Interest