

Supplementary Figure legends

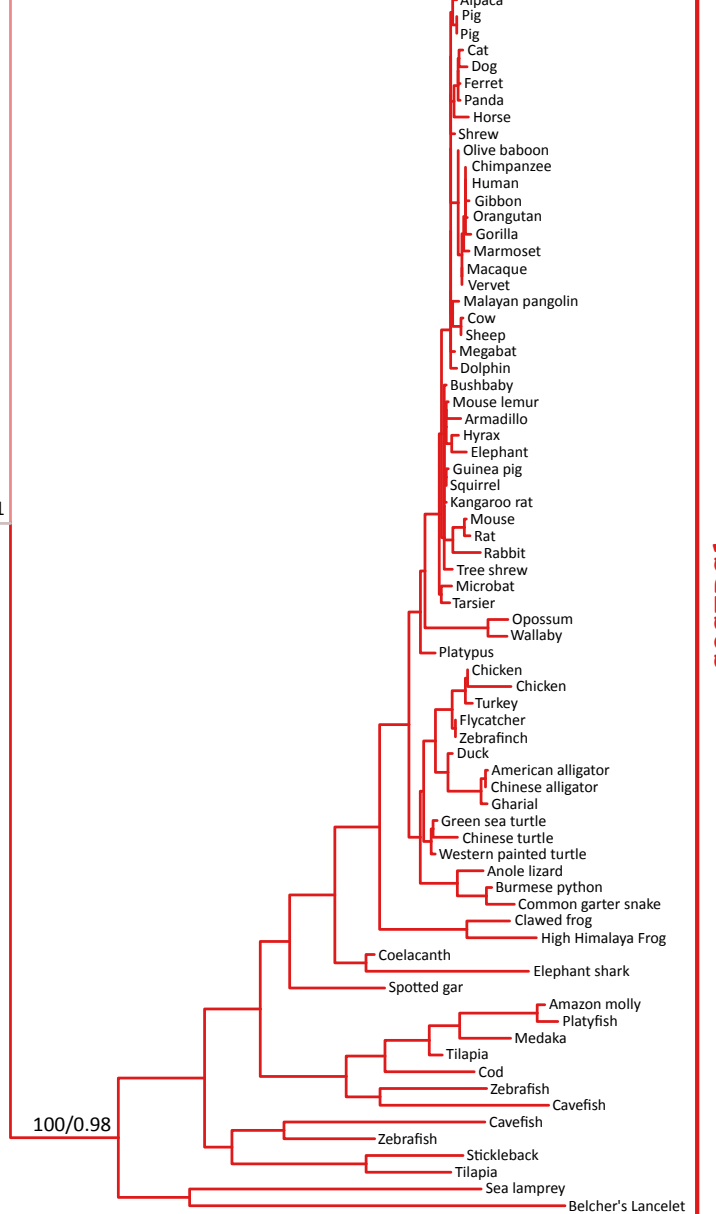
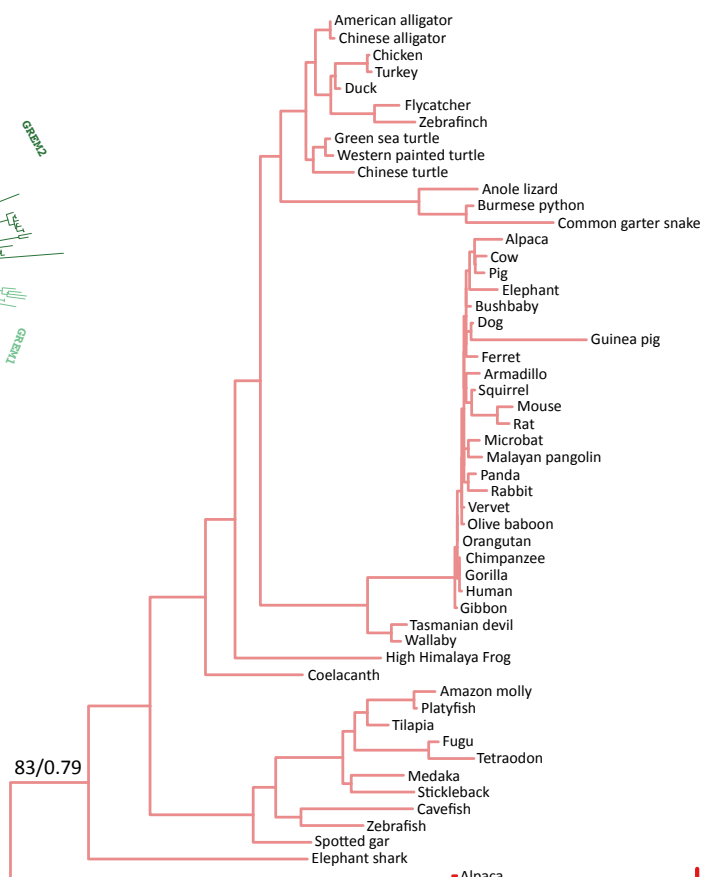
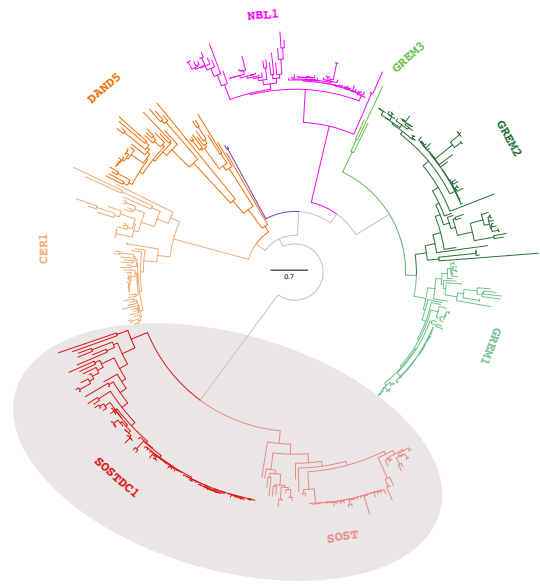
Figure S1A. Maximum likelihood tree depicting relationships among SOST and SOSTDC1 genes. Number on the nodes correspond to maximum likelihood ultrafast bootstrap and Bayesian posterior probabilities support values.

Figure S1B. Maximum likelihood tree depicting relationships among CER and DAND5 genes. Number on the nodes correspond to maximum likelihood ultrafast bootstrap and Bayesian posterior probabilities support values.

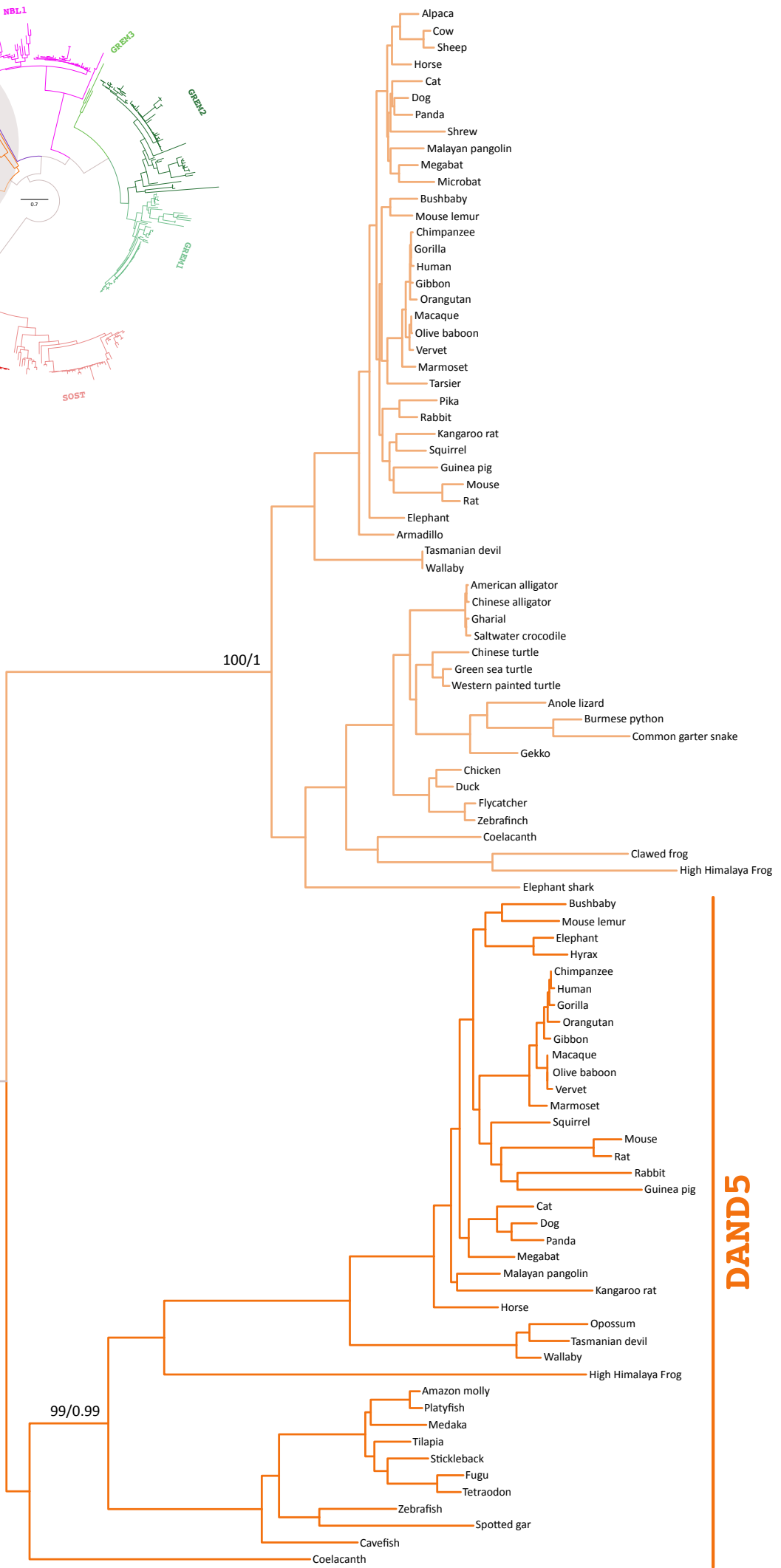
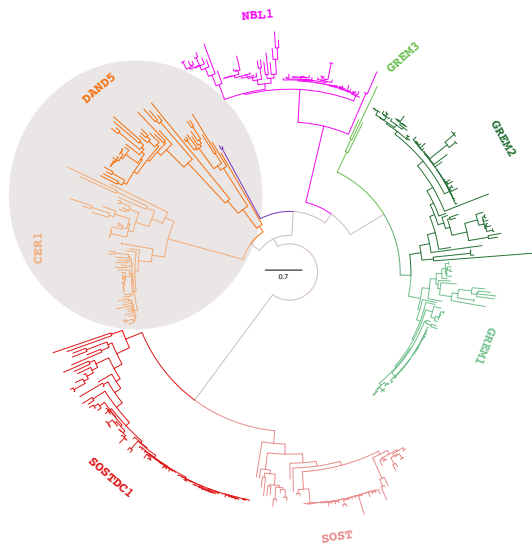
Figure S1C. Maximum likelihood tree depicting relationships among NBL1 genes. Number on the nodes correspond to maximum likelihood ultrafast bootstrap and Bayesian posterior probabilities support values.

Figure S1D. Maximum likelihood tree depicting relationships among GREM genes. Number on the nodes correspond to maximum likelihood ultrafast bootstrap and Bayesian posterior probabilities support values.

Figure S1E. Sister group relationships among the main groups of deuterostomes.



0.7



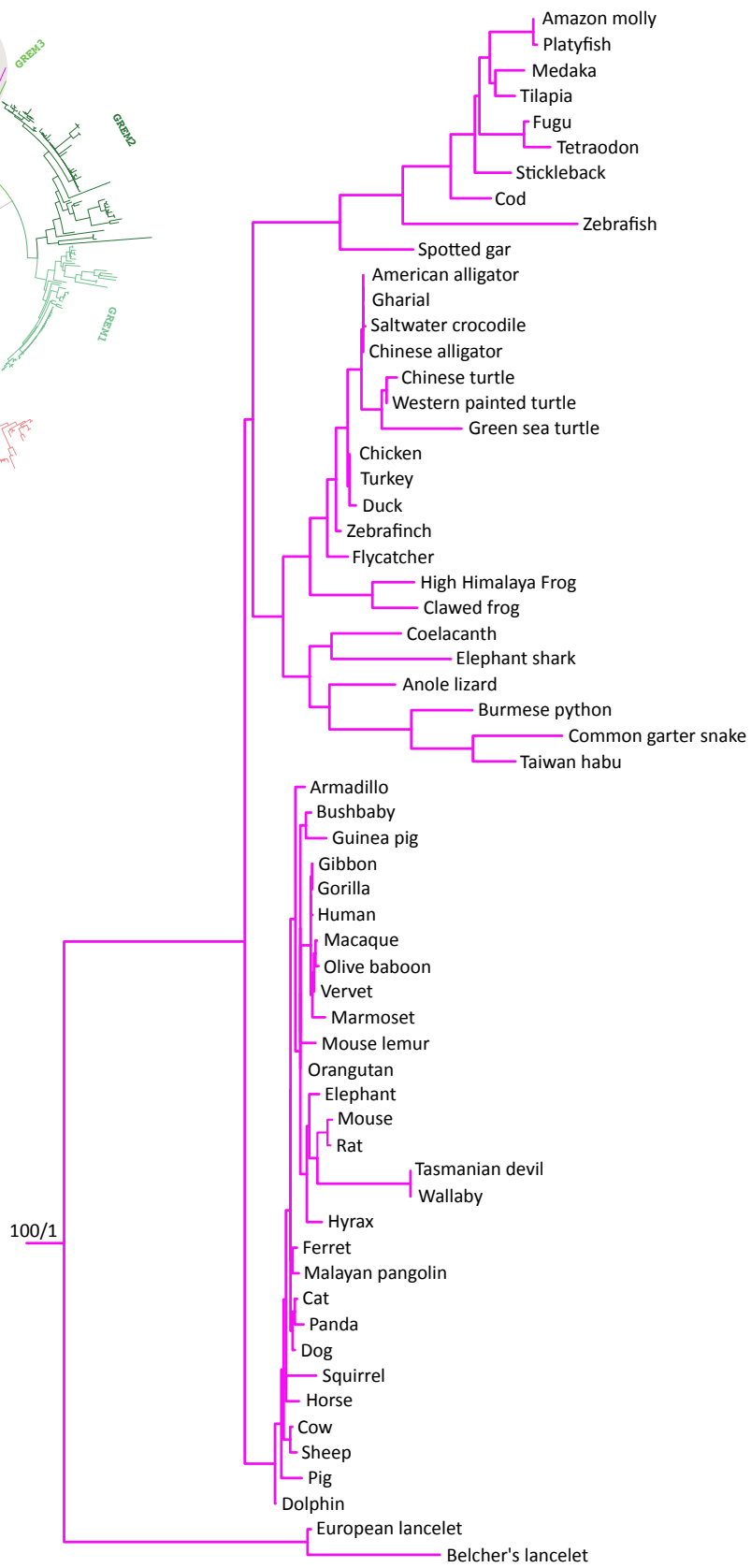
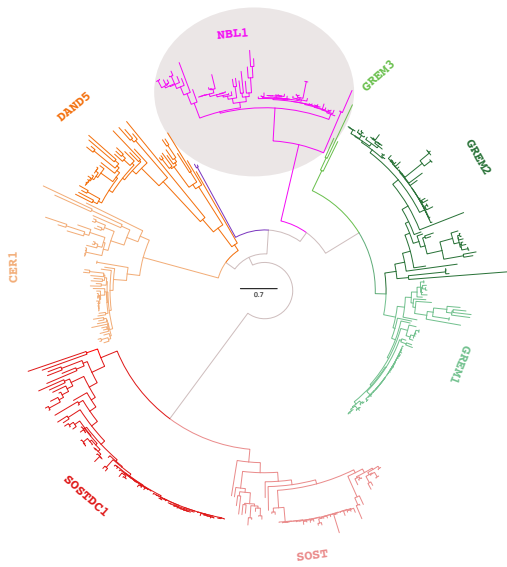
CER1

DAND5

0.7

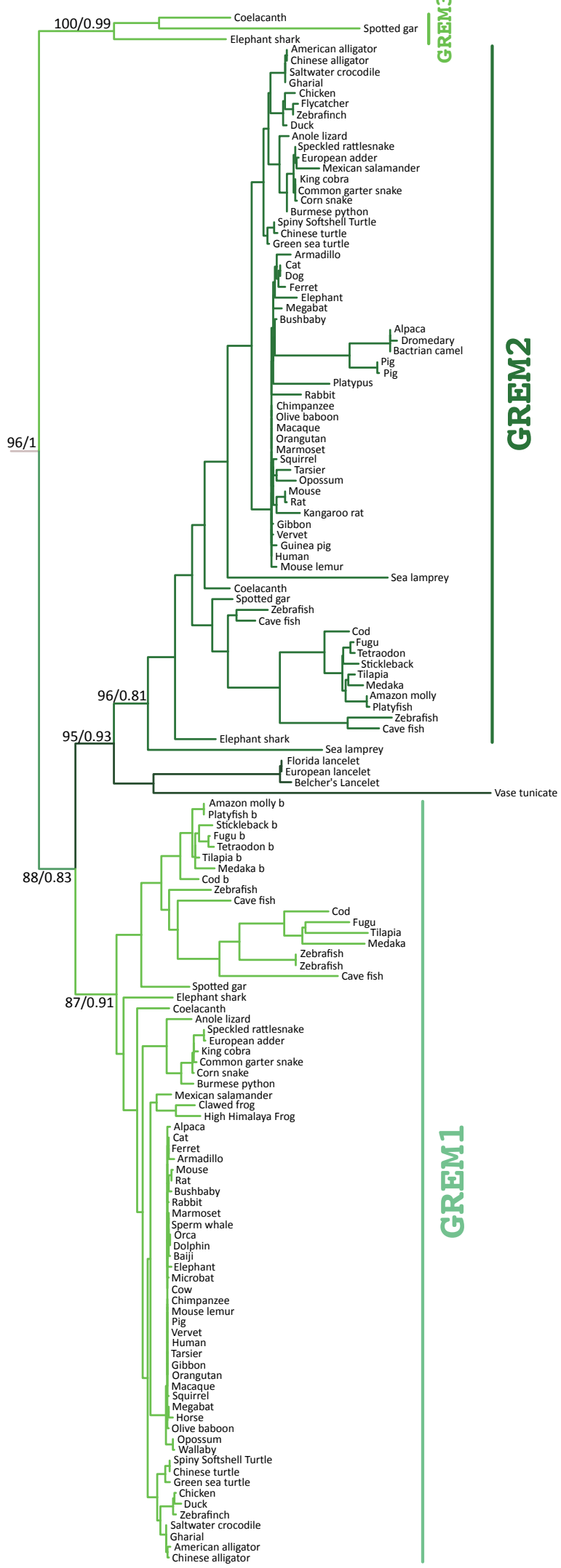
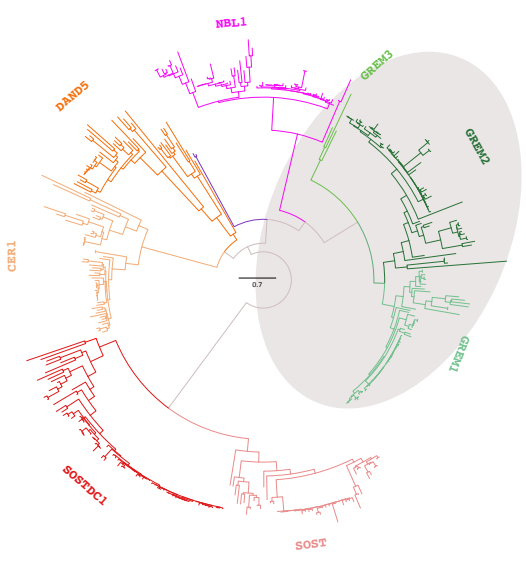
- Alpaca
- Cow
- Sheep
- Horse
- Cat
- Dog
- Panda
- Shrew
- Malayan pangolin
- Megabat
- Microbat
- Bushbaby
- Mouse lemur
- Chimpanzee
- Gorilla
- Human
- Gibbon
- Orangutan
- Macaque
- Olive baboon
- Vervet
- Marmoset
- Tarsier
- Pika
- Rabbit
- Kangaroo rat
- Squirrel
- Guinea pig
- Mouse
- Rat
- Elephant
- Armadillo
- Tasmanian devil
- Wallaby
- American alligator
- Chinese alligator
- Gharial
- Saltwater crocodile
- Chinese turtle
- Green sea turtle
- Western painted turtle
- Anole lizard
- Burmese python
- Common garter snake
- Gekko
- Chicken
- Duck
- Flycatcher
- Zebrafinch
- Coelacanth
- Clawed frog
- High Himalaya Frog
- Elephant shark

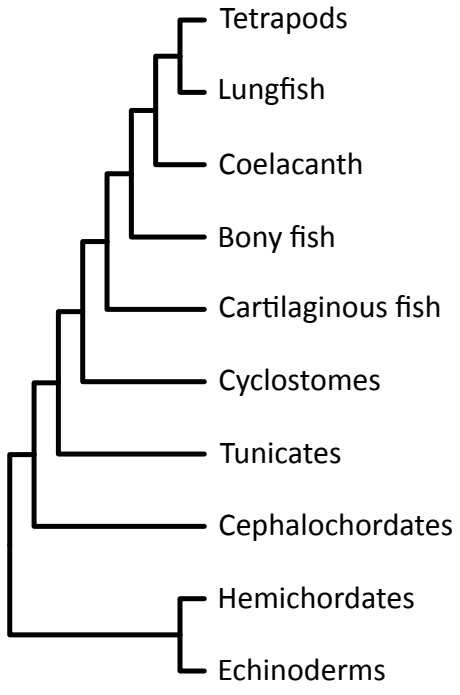
- Bushbaby
- Mouse lemur
- Elephant
- Hyrax
- Chimpanzee
- Human
- Gorilla
- Orangutan
- Gibbon
- Macaque
- Olive baboon
- Vervet
- Marmoset
- Squirrel
- Mouse
- Rat
- Rabbit
- Guinea pig
- Cat
- Dog
- Panda
- Megabat
- Malayan pangolin
- Kangaroo rat
- Horse
- Opossum
- Tasmanian devil
- Wallaby
- High Himalaya Frog
- Amazon molly
- Platyfish
- Medaka
- Tilapia
- Stickleback
- Fugu
- Tetraodon
- Zebrafish
- Spotted gar
- Cavefish
- Coelacanth



NBL1

0.7





Ambulacraria

Gnathostomes

Vertebrates

Olfactores

Chordates

Deuterostomes