

Phylogenetic tree of the Gbb gene family. The tree is rooted at the bottom left with *Tca Act*. Major clades include:

- Gbb-like genes:** *Gbb*, *Gbb1*, *Gbb2*, *Eba Gbb* (bootstrap 99), *Gbb* (bootstrap 97, 89), *Eba Gbb* (bootstrap 99).
- Scw-like genes:** *Scw*, *Eba Scw* (bootstrap 100).
- BMP10-like genes:** *BMP10*, *Tca BMP10* (bootstrap 84).
- Dpp-like genes:** *Dpp*, *Eba Dpp* (bootstrap 99, 95).
- Daw-like genes:** *Daw*, *Tca Daw* (bootstrap 98).
- Myo-like genes:** *Myo*, *Tca Myo* (bootstrap 100).
- Mav-like genes:** *Mav*, *Tca Mav* (bootstrap 100).

 A scale bar of 0.5 is shown at the bottom right.

B

Phylogenetic tree showing relationships between *Eba* and *Tca* strains. The tree is rooted at the bottom left. The main branches are labeled with strain names: *Eba Babo*, *Tca Babo*, *Sax*, *Eba Sax*, *Tca Sax*, *Tkv*, *Eba Tkv*, *Tca Tkv*, *Tca Put*, *Eba Put*, *Put*, *Tca Wit*, *Eba Wit*, and *Wit*. Bootstrap values are shown at the nodes: 100, 99, 100, 43, 99, 98, 99, 100. A scale bar of 0.5 is located at the bottom right.

Phylogenetic tree of the *Eba* gene region. The tree shows relationships between various taxa: *Tca Smox*, *Smox*, *Eba Smox*, *Tca Mad*, *Eba Mad*, *Mad*, *Med*, *Eba Med*, and *Tca Med*. Bootstrap values are indicated at the nodes: 92, 97, 100, 96, 100, and 63. A scale bar of 0.5 is provided.

Phylogenetic tree showing relationships between *Eba*, *Tld*, *Tok*, and *Tca*. The tree has a root with two main branches. The left branch leads to a node labeled "Eba Tld" with a bootstrap value of 100. The right branch leads to a node labeled "Tok" with a bootstrap value of 100. The "Eba Tld" node further branches into "Eba" and "Tld". The "Tok" node further branches into "Tok" and "Tca Tok (Tok/Tlk)". A scale bar of 0.5 is shown at the bottom right.

Phylogenetic tree of the Kex2 gene family in *Drosophila*. The tree shows relationships between various Kex2 genes, with bootstrap values indicated at the nodes. The scale bar represents 1.0 substitutions per site.

Phylogenetic tree showing the relationships between *Eba* and *Tsg* genes. The tree is rooted with *Srw* and *Tca Tsg (Tsg/Cv/Srw)*. The *Eba* clade includes *Eba Cv-like*, *Eba Cv*, and *Cv*. The *Tsg* clade includes *Eba Tsg* and *Tsg*. Bootstrap values are indicated at the nodes: 68 for the node joining *Tca Tsg* and the *Eba* clade, 97 for the node joining *Eba Tsg* and *Tsg*, 53 for the node joining *Eba Cv-like* and *Eba Cv*, and 57 for the node joining *Eba Cv* and *Cv*. A scale bar of 0.5 is shown at the bottom right.

G

Phylogenetic tree G shows the relationships between Gremlin and DAN proteins. The tree is rooted with Mmu Gremlin and Tca Gremlin. The bootstrap values are 73, 78, 100, and 84. The sequences are: Tca Gremlin, Mmu Gremlin, Mmu Dante, Mmu Cerberus, Mmu DAN, Eba DAN, and Tca DAN. A scale bar of 1.0 is shown.