

Fig. 4. Dmob4 is one of four *Drosophila* members of the family of highly conserved Mob proteins. A) A phylogenetic tree of representative Mob proteins from yeast, humans, mice, worms, frogs and flies shows that the four fly Mob proteins (arrows) are members of distinct Mob family subclasses that each contain proteins from both humans and mice. The subclasses containing Dmob1 and Dmob3 (red arrows) are more closely related to the founding Mob family protein, *S. cerevisiae* Mob1p (underlined in red), than are the subclasses containing Dmob2 and Dmob4 (black arrows), with the Dmob4 subclass being the most distant. (The tree constructed with MacVector™ using neighbor joining method, with horizontal distance from branch points representing proportional differences between sequences.) B) Alignment of Dmob4 with human and mouse homologues in same branch of phylogenetic tree. Solid blue boxes are identical residues and blue-outlined boxes are similar residues. The human and mouse sequences are 99.6% identical (residues in solid blue boxes), differing at only 1 position, while Dmob4 is 79% identical, with an additional 8% similarity (residues in blue outlined boxes). (Alignment constructed using ESPrnt, www.esprnt.ibcp.fr.)

