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Actin-79B      MCDEEASALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDCYVGDEAQ 60
Actin-88F      MCDDDAGALVIDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQ 60
Actin-57B      MCDDEVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQ 60
Actin-87E      MCDDEVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQ 60
Actin-5C       MCDEEVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQ 60
Actin-42A      MCDEEVAALVVDNGSGMCKAGFAGDDAPRAVFPSIVGRPRHQGVMVGMGQKDSYVGDEAQ 60
                ***:..**:*:*****:*****:*****:*****:*****:*****:*****

Actin-79B      SKRGILSLKYPPIEHGII TNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKM 120
Actin-88F      SKRGILTLKYPPIEHGII TNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKM 120
Actin-57B      SKRGILTLKYPPIEHGII TNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKM 120
Actin-87E      SKRGILTLKYPPIEHGII TNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKM 120
Actin-5C       SKRGILTLKYPPIEHGIV TNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKM 120
Actin-42A      SKRGILTLKYPPIEHGIV TNWDDMEKIWHHTFYNELRVAPEEHPVLLTEAPLNPKANREKM 120
                *****:*****:*****:*****:*****:*****:*****:*****

Actin-79B      TQIMFETFNSPAMYVAIQAVLSLYASGRRTTGIVLDSGDGVSHTVPIYEGYALPHAILRLD 180
Actin-88F      TQIMFETFNSPAMYVAIQAVLSLYASGRRTTGIVLDSGDGVSHTVPIYEGFALPHAILRLD 180
Actin-57B      TQIMFETFNSPAMYVAIQAVLSLYASGRRTTGIVLDSGDGVSHTVPIYEGYALPHAILRLD 180
Actin-87E      TQIMFETFNAPAMYVAIQAVLSLYASGRRTTGIVLDSGDGVSHTVPIYEGYALPHAILRLD 180
Actin-5C       TQIMFETFNT PAMYVAIQAVLSLYASGRRTTGIVLDSGDGVSHTVPIYEGYALPHAILRLD 180
Actin-42A      TQIMFETFNT PAMYVAIQAVLSLYASGRRTTGIVLDSGDGVSHTVPIYEGYALPHAILRLD 180
                *****:*****:*****:*****:*****:*****:*****:*****

Actin-79B      LAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMATAAASTSLKES 240
Actin-88F      LAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMATAAASTSLKES 240
Actin-57B      LAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMATAAASTSLKES 240
Actin-87E      LAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMATAAASTSLKES 240
Actin-5C       LAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMATAASSSSLEKS 240
Actin-42A      LAGRDLTDYLMKILTERGYSFTTTAEREIVRDIKEKLCYVALDFEQEMATAASSSSLEKS 240
                *****:*****:*****:*****:*****:*****:*****:*****

Actin-79B      YELPDGQVITIGNERFRFP EALFQPSFLGMESCGIHETVYQSIMKCDVDIRKDLYANNVL 300
Actin-88F      YELPDGQVITIGNERFRCP EALFQPSFLGMESCGIHETVYNSIMKCDVDIRKDLYANSVL 300
Actin-57B      YELPDGQVITIGNERFRCP ESLFQPSFLGMESCGIHETVYNSIMKCDVDIRKDLYANIVM 300
Actin-87E      YELPDGQVITIGNERFRCP ESLFQPSFLGMESCGIHETVYNSIMKCDVDIRKDLYANIVM 300
Actin-5C       YELPDGQVITIGNERFRCP EALFQPSFLGMEACGIHETTYNSIMKCDVDIRKDLYANTVL 300
Actin-42A      YELPDGQVITIGNERFRCP ESLFQPSFLGMEACGIHETTYNSIMKCDVDIRKDLYANTVL 300
                ***** **:*:*****:*****:*****:*****:*****:*****

Actin-79B      SGGTTMYPGIADRMQKEIT ALAPSTIKIKIIAPPERKYSVWIGGSILASLSTFQQMWISK 360
Actin-88F      SGGTTMYPGIADRMQKEIT ALAPSTIKIKIIAPPERKYSVWIGGSILASLSTFQQMWISK 360
Actin-57B      SGGTTMYPGIADRMQKEIT SLAPSTIKIKIIAPPERKYSVWIGGSILASLSTFQQMWISK 360
Actin-87E      SGGTTMYPGIADRMQKEIT ALAPSTIKIKIIAPPERKYSVWIGGSILASLSTFQQMWISK 360
Actin-5C       SGGTTMYPGIADRMQKEIT ALAPSTMKIKIIAPPERKYSVWIGGSILASLSTFQQMWISK 360
Actin-42A      SGGTTMYPGIADRMQKEIT ALAPSTMKIKIVAPPERKYSVWIGGSILASLSTFQQMWISK 360
                *****:*****:*****:*****:*****:*****:*****

Actin-79B      QEYDESGPGIVHRKCF 376
Actin-88F      QEYDESGPGIVHRKCF 376
Actin-57B      EEYDESGPGIVHRKCF 376
Actin-87E      QEYDESGPGIVHRKCF 376
Actin-5C       QEYDESGPSIVHRKCF 376
Actin-42A      QEYDESGPSIVHRKCF 376
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Figure S2. Clustal W alignment of proteins encoded by six actin genes in *Drosophila*.

* identical residues in all sequences, : highly conserved residues, . weakly conserved residues. Actin-79B is encoded by gene CG7478 on the left arm of chromosome 3, Actin-88F by gene CG5178 on the right arm of chromosome 3, Actin-57B by gene CG10067 on the right arm of chromosome 2, Actin-87E by gene CG18290 on the right arm of chromosome 3, Actin-5C by gene CG4027 on the X-chromosome and Actin-42A by gene CG12051 on the right arm of chromosome 2.