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UVM Undergraduate Research Conference Abstract

Abstract

Flightin is an endogenous protein in the model organism *Drosophila melanogaster* and is known to have three distinct regions. Flightin is found only in the indirect flight muscle and is integral for sarcomere structure, length and stability in the fly. Flightin is also required for flight. To elucidate the function of the three regions, two knockout lines have been created. One knockout line is a deletion of the C-terminus region (Line 7) and the other is a deletion of the N-terminus region (NDA). We also have created a cross between the two lines that contains one copy of Flightin with the C-terminus deletions and one copy of Flightin with the N-Terminus region (DH1). To determine if phenotypic differences in these lines are caused by protein expression, we are currently attempting to quantify the amount of protein in these lines with a control that has full length Flightin (A64).