

Tubulin domains for the interaction of microtubule associated protein DMAP-85 from *Drosophila melanogaster*

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The interaction of microtubule associated proteins (MAPs) with the microtubule system has been characterized in depth in neuronal cells from various mammalian species. These proteins interact with well-defined domains within the acidic tubulin carboxyl-terminal regulatory region. However, there is little information on the mechanisms of MAPs-tubulin interactions in nonmammalian systems. Recently, a novel tau-like protein designated as DMAP-85 has been identified in *Drosophila melanogaster*, and the regulation of its interactions with cytoskeletal elements was analyzed throughout different developmental stages of this organism. In this report, the topographic domains involved in the binding of DMAP-85 with tubulin heterodimer were investigated. Affinity chromatography of DMAP-85 in matrixes of taxol-stabilized microtubules showed the reversible interaction of DMAP-85 with domains on the microtubular surface. Co-sedimentation studies using the subtilisin-treated tubulin (S-tubulin) indica