ANALYZING THE RELATIONSHIP BETWEEN PKM2 AND β-CATENIN PROTEINS IN HUMAN CANCERS

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Tumorigenesis is promoted by the manipulation of several co-factors and pathways, in which PKM2 and β-catenin proteins play a significant role in a variety of cancers. New research states that these two hegemonic cancer proteins directly bind with each other and may provide a new angle for cancer treatment if this interaction is better understood. There are many studies detailing the influence and characteristics of these two individual proteins in the cytosol and in cancer; however, it is only recently that cancer research has found a direct connection between these two cancer proteins. In order to further understand the relationship between PKM2 and β-catenin proteins, three Enzyme-Linked Immunosorbent Assays (ELISA) were performed to analyze the behavior of the recombinant versions of these proteins. These ELISA reactions produced positive correlations in binding between PKM2 and β-catenin recombinant proteins, confirming current cancer research and illuminating a new approach for cancer therapeutics. A better understanding of the relationship between PKM2 and β-catenin proteins may potentially allow the development of novel cancer therapeutics that will ultimately target tumors from a new angle.