

EVIDENCE FOR A PROTEIN PHOSPHATASE OF  $M_r = 35,000$  AS A METALLO-ENZYME. Kuang-Jen Hsiao, Wanda W.S. Chan and Heng-Chun Li, Dept. of Biochemistry, Mt. Sinai Sch. of Med., CUNY, New York, N.Y. 10029.

A divalent cation-independent protein phosphatase ( $M_r = 35,000$ ) has been purified from canine heart to apparent homogeneity as judged by disc gel electrophoresis. The enzyme is nonspecific and is active toward phosphorylase a, phosphorylated protein kinase, myosin, histone and casein. The enzyme can be rapidly inactivated at  $30^\circ$  by  $nM$  concentration of ATP or ADP (less effective) but not AMP, adenosine, EDTA or  $P_i$ . Other nucleoside triphosphates and  $PP_i$  are as effective as ATP.  $Mg^{2+}$  prevents the enzyme from ATP inactivation.  $P_i$  which is a competitive inhibitor of the enzyme with respect to phosphoprotein

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