

Identification of an apyrase activating protein and of calmodulin in *Solanum tuberosum*

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Three types of effector proteins have been isolated from a partially purified protein preparation of potato tuber. One of the proteins is a typical calmodulin which has no effect on apyrase. The two other proteins modulate ATPase and ADPase activities; one of them with an activating and the other with an inhibitory effect on apyrase. Calmodulin from potato tuber purified to homogeneity had a Mr of 17 500 and an isoelectric point of 4.4. Although the apyrase activating protein is not a pure fraction it differs from calmodulin because unlike this protein it is independent of calcium and does not activate cyclic nucleotide phosphodiesterase from bovine heart. Treatment of the activating protein with tetranitromethane reduces its effect on apyrase, while no change was detected upon treatment with bisdithionitrobenzoic acid. © 1987.