

32-3414: CAPN1 Recombinant Protein

Alternative Name : Calpain-1 catalytic subunit, EC 3.4.22.52, Calpain-1 large subunit, Calcium-activated neutral proteinase 1, Calpain mu-type, muCANP, Micromolar-calpain, Cell proliferation-inducing gene 30 protein, CANP 1, CAPN1, CANPL1, PIG30, CANP, muCL, CANP1.

Description

Source : Human Erythrocytes. CAPN1 consists of an 80-kDa large subunit and a 30 kDa small subunit. CAPN1 was purified by sequential chromatography through DEAE-Sepharose, A1.5m Bio-Gel, and Phenyl-Sepharose CL-4B columns. Calpain's activity is attributed to two main isoforms: -calpain and m-calpain, which are ubiquitously expressed proteases implicated in cellular migration, cell cycle progression, degenerative processes and cell death. These heterodimeric enzymes are composed of distinct catalytic subunits, encoded by Capn1 (-calpain) or Capn2 (m-calpain), and a common regulatory subunit encoded by Capn4. CAPN1 is a calcium-regulated non-lysosomal thiol-protease which catalyzes limited proteolysis of the substrates involved in cytoskeletal remodeling and signal transduction. CAPN1 is activated by micromolar concentrations of calcium and inhibited by calpastatin.

Product Info

Amount : 5 µg
Purification : Greater than 90% as determined by SDS-PAGE.
Content : 50mM imidazole-HCl, 100mM NaCl, 5mM EGTA, 1mM DTT and 10% sucrose.
Storage condition : CAPN1 although stable at 10°C for 1 week, should be stored below -18°C. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Please prevent freeze-thaw cycles.

