

32-2642: PAPP-A Recombinant Protein

Alternative Name : Pappalysin-1, Pregnancy-associated plasma protein A, PAPP-A, Insulin-like growth factor-dependent IGF-binding protein 4 protease, IGF-dependent IGFBP-4 protease, IGFBP-4ase, PAPP, PAPA, DIPLA1, PAPP1, ASBAP2.

Description

Source : Escherichia Coli. PAPP-A Human Recombinant produced in E.Coli is single, a non-glycosylated, Polypeptide chain containing 191 amino acids fragment (81-271) corresponding to the PAPP-A 'Jelly-Roll' domain fragment, having a total molecular mass of 30kDa and fused with a 4.5kDa amino-terminal hexahistidine tag. The PAPP-A is purified by proprietary chromatographic techniques. PAPP-A is a large zinc binding protein, which acts as a metalloprotease and specifically cleaves IGFBP-4 and IGFBP-5, resulting in release of bound IGF. PAPP-A can also act as a regulator of IGF bioactivity in a number of biological systems, including the human ovary and cardiovascular systems. It was shown that PAPP A levels are elevated in patients with unstable angina or acute myocardial infarction. Furthermore, PAPP-A is believed to be involved in local proliferative processes such as wound healing and bone remodeling. Moreover, PAPP-A is produced in high concentrations during pregnancy and is released into the maternal circulation. In placenta, PAPP A is expressed in X cells in septa and anchoring villi, and in syncytiotrophoblasts in the chorionic villi. Lower levels of PAPP-A are found in an array of other tissues including kidney, myometrium, endometrium, ovaries, breast, prostate, bone marrow, colon, fibroblasts and osteoblasts. PAPP-A is present in serum and placenta during pregnancy; with levels increasing throughout pregnancy. Low levels of PAPP A are associated with a number of foetal chromosomal abnormalities, as well as pre-eclampsia and stillbirth. PAPP-A levels may be a potentially highly specific marker for heart disease. PAPP-A proteolytic activity is inhibited by targeting substrate exosite binding.

Product Info

Amount : 10 µg
Purification : Greater than 95.0% as determined by SDS-PAGE.
Content : PAPP-A protein is supplied in 1x PBS and 50% glycerol.
Storage condition : Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. Please avoid freeze thaw cycles.

