

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, PAPPA, PAPA, DIPLA1, PAPPA1, ASBABP2.

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. PAPPA 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, PAPPA 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 PAPPA 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. PAPPA 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.