

Recombinant Human PAPP-A2/Pappalysin 2 Protein (His Tag)

Catalog No. PKSH031546

Note: Centrifuge before opening to ensure complete recovery of vial contents.

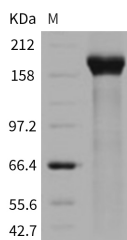
Description

Synonyms	PAPP-A2;PAPP-E;PAPPE;PLAC3
Species	Human
Expression Host	HEK293 Cells
Sequence	Ser 234-Cys 1396
Accession	NP_064714.2
Calculated Molecular Weight	131 kDa
Observed molecular weight	170-180 kDa
Tag	C-His
Bioactivity	Not validated for activity

Properties

Purity	> 90 % as determined by reducing SDS-PAGE.
Endotoxin	< 1.0 EU per µg of the protein as determined by the LAL method.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4, 5% trehalose, 5% mannitol, 0.01% Tween 80. Normally 5% - 8% trehalose, mannitol and 0.01% Tween 80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



> 90 % as determined by reducing SDS-PAGE.

Background

Pappalysin-2/PAPP-A2 is the second member of the pappalysin family of metzincin superfamily, of which PAPP-A is the first member. There is no homology between the prepro-peptides of PAPP-A and PAPP-A2, but 46% of the residues

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of mature PAPP-A are also present in mature PAPP-A2. PAPP-A specifically cleaves insulin-like growth factor-binding protein(IGFBP)-4, one of six known modulators of IGF-I and -II, whereas PAPP-A2 specifically cleaved IGFBP-5 at one site, between Ser-143 and Lys-144. In contrast to the cleavage of IGFBP-4 by PAPP-A that strictly requires the presence of IGF, the cleavage of IGFBP-5 by PAPP-A2 was IGF-independent. Recent data firmly establish PAPP-A and IGFBP-4 as an important functional pair in several systems. Because of its close relationship with PAPP-A, both structurally and functionally, PAPP-A2 is a likely candidate for IGFBP-5 proteinase in many tissues and conditioned media where IGFBP-5 proteolysis has been reported.