

Recombinant Protein Technical Manual Recombinant Human PAPPA2/Pappalysin 2 Protein (His Tag) RPES3909

Product Data:

Product SKU: RPES3909

Size: 20µg

Species: Human

Expression host: HEK293 Cells

Uniprot: NP_064714.2

Protein Information:	
Molecular Mass:	131 kDa
AP Molecular Mass:	17080 kDa
Tag:	C-His
Bio-activity:	
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin:	< 1.0 EU per μg as determined by the LAL method.
Storage:	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
Reconstitution:	Please refer to the printed manual for detailed information.
Application:	
Synonyms:	PAPP-A2;PAPP-E;PAPPE;PLAC3

Sequence: Ser 234-Cys 1396

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 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 Ser43 and Lys44. 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.