

Human PAPPA2 / Pappalysin 2 Protein (His Tag)

Catalog Number: 10528-H08H



Sino Biological Inc.
Biological Solution Specialist

General Information

Gene Name Synonym:

PAPP-A2; PAPP-E; PAPPE; PLAC3; PAPP-A2; Pappe; PLAC3

Protein Construction:

A DNA sequence encoding the human PAPPA2 mature form (NP_064714.2) corresponding to amino acid (Ser 234-Cys 1396) was expressed, with a carboxy-terminal polyhistidine tag.

Source: Human

Expression Host: Human Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Endotoxin:

< 1.0 EU per µg of the protein as determined by the LAL method

Stability:

Samples are stable for up to twelve months from date of receipt at -70 °C

Predicted N terminal: Ser 234

Molecular Mass:

The secreted recombinant human PAPPA2 consists of 1174 amino acids with the predicted molecular mass of 131 kDa. As a result of glycosylation, rhPAPPA2 migrates as an approximately 170-180 kDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile PBS, pH 7.4

Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Specific concentrations are included in the hardcopy of COA. Please contact us for any concerns or special requirements.

Usage Guide

Storage:

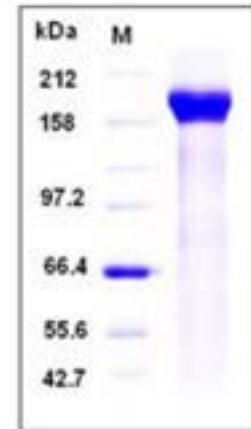
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

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 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.

References

1. Lisbeth S Laursen. et al., 2002, Vol. 277 (49): 47225-34.
2. Michael T Overgaard. et al., 2001, The Journal of Biological Chemistry. 276 (24): 21849-53.

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