Human Carboxypeptidase A2 / CPA2 Protein (His Tag)

Catalog Number: **10499-H08H**

Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

CPA2

Protein Construction:

A DNA sequence encoding the pre pro form of human CPA2 (NP_001859.1) (Met 1-Tyr 417) was expressed with a C-terminal polyhistidine tag.

Source: Human

Expression Host: HEK293 Cells

QC Testing

Purity: > 90 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to cleave a colorimetric peptide substrate, N-acetyl-Phe-Thiaphe-OH (N-Ac-PSP, Peptide International's Catalog# STP-3621-PI), in the presence of 5,5'Dithio-bis (2-nitrobenzoic acid) (DTNB), as measured using the wavelength at 405 nm and the extinction coefficient of 13,260 M-1 cm-1. The specific activity is >4,000 pmoles/min/µg .

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 ℃

Predicted N terminal: Leu 17

Molecular Mass:

The secreted recombinant human CPA2 existing as the proform consists of 412 amino acids and has a predicted molecular mass of 46 kDa also as estimated by SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 25mM Tris, 0.15mM NaCl, 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:

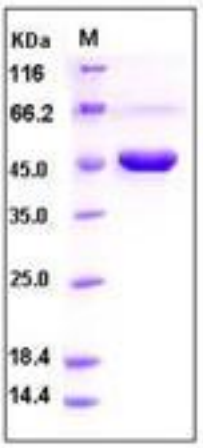
Store it under sterile conditions at -20℃ to -80℃ upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

Carboxypeptidase A2 (CPA2) is a secreted pancreatic procarboxy - peptidase, and cleaves the C-terminal amide or ester bond of peptides that have a free C-terminal carboxyl group. The hydrolytic action of CPA2 was identified with a preference towards long substrates with aromatic amino acids in their C-terminal end, particularly tryptophan. CPA2 comprises a signal peptide, a pro region and a mature chain, and can be activated after cleavage of the pro peptide. Three different forms of human pancreatic procarboxypeptidase A have been isolated, and the A1 and A2 forms are always secreted as monomeric proteins with different biochemical properties.

References

1.Catasus, L. et al., 1995. J. Biol. Chem. 270: 6651-6657. 2.Aloy, P. et al., 1998, Biol. Chem. 379: 149-155. 3.Laethem, RM. et al., 1996, Arch. Biochem. Biophys.332: 8-18.