

Mouse DPP7 / DPPII / DPP2 Protein (His Tag)



Sino Biological Inc.

Biological Solution Specialist

Catalog Number: 51019-M08H

General Information

Gene Name Synonym:

DPP2; DPPII; QPP; Dpp2; DPPII; QPP

Protein Construction:

A DNA sequence encoding the mouse DPP7 (Q9ET221) (Met1-Arg 506) was expressed, with a C-terminal polyhistidine tag.

Source: Mouse

Expression Host: Human Cells

QC Testing

Purity: > 92 % as determined by SDS-PAGE

Bio Activity:

Measured by its ability to cleave the fluorogenic peptide substrate, Lys-Pro-AMC(KP-AMC). The specific activity is > 20,000 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 °C

Predicted N terminal: Asp 34

Molecular Mass:

The recombinant mouse DPP7 consists of 484 amino acids and predicts a molecular mass of 53.7 KDa. In SDS-PAGE under reducing conditions, the apparent molecular mass of rmDPP7 is approximately 65 KDa as a result of glycosylation.

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:

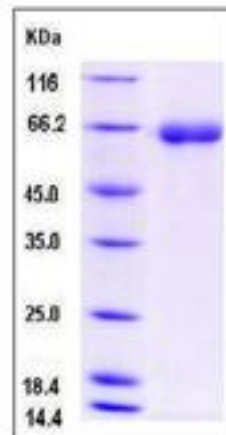
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

DPP7 (dipeptidylpeptidase 7), also known as DPPII and DPP2, is a post-proline cleaving aminopeptidase expressed in quiescent lymphocytes. Dipeptidyl peptidases (DPPs) have post-proline dipeptidyl aminopeptidase activity, cleaving Xaa-Pro dipeptides from the N-termini of proteins. DPPs mediate regulatory activity of their substrates and have been linked to a variety of diseases including type 2 diabetes, obesity and cancer. DPPs can bind specific voltage-gated potassium channels and alter their expression and biophysical properties and may also influence T cells. DPP proteins include DPRP1, DPRP2, DPP3, DPP7, DPP10, DPPX and CD26. It localizes to lysosomes. DPP7 localizes to lysosomes and exists as a homodimer via its leucine zipper motif and is involved in the degradation of oligopeptides. In response to calcium release, it can be secreted in its active form. It is essential for lymphocyte survival, as the inhibition of DPP7 results in quiescent cell apoptosis.

References

- 1.Chiravuri M, *et al.* (1999) A novel apoptotic pathway in quiescent lymphocytes identified by inhibition of a post-proline cleaving aminodipeptidase: a candidate target protease, quiescent cell proline dipeptidase. *J Immunol.* 163(6):3092-9.
- 2.Fukasawa KM, *et al.* (2001) Cloning and functional expression of rat kidney dipeptidyl peptidase II. *Biochem J.* 353(Pt 2):283-90.
- 3.Fornas E, *et al.* (1992) Effect of cholesterol and its autooxidation derivatives on endocytosis and dipeptidyl peptidases of aortic endothelial cells. *Histol Histopathol.* 7(2):163-8.

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