

Mouse Smad5 Protein

Catalog Number: 50728-MNCB



Sino Biological
Biological Solution Specialist

General Information

Gene Name Synonym:

1110051M15Rik; AI451355; Dwf-C; Madh5; MusMLP

Protein Construction:

A DNA sequence encoding the mouse SMAD5 (P97454) (Thr2-Ser465) was expressed and purified with two additional amino acids (Gly & Pro) at the N-terminus.

Source: Mouse

Expression Host: Baculovirus-Insect 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: Gly

Molecular Mass:

The recombinant mouse SMAD5 consists of 466 amino acids and predicts a molecular mass of 52.2 KDa. It migrates as an approximately 57 KDa band in SDS-PAGE under reducing conditions.

Formulation:

Lyophilized from sterile 20mM Tris, 500mM NaCl, 10% glycerol, pH8.0.

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:

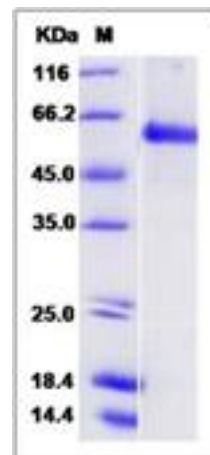
Store it under sterile conditions at -20°C to -80°C upon receiving. Recommend to aliquot the protein into smaller quantities for optimal storage.

Avoid repeated freeze-thaw cycles.

Reconstitution:

Detailed reconstitution instructions are sent along with the products.

SDS-PAGE:



Protein Description

SMAD5 is a member of the SMAD family. Members of this family mediate signal transduction by the TGF-beta/activin/BMP-2/4 cytokine superfamily from receptor Ser/Thr protein kinases at the cell surface to the nucleus. SMAD5 is involved in the TGF-beta signaling pathway that results in an inhibition of the proliferation of hematopoietic progenitor cells. It is also involved in cell signalling and modulates signals of bone morphogenetic proteins (BMP's). The binding of ligands causes the oligomerization and phosphorylation of the SMAD5 protein. SMAD5 is a receptor regulated SMAD (R-SMAD) and is activated by bone morphogenetic protein type 1 receptor kinase.

References

1.Vinayagam A. et al., 2011, Sci Signal. 4 (189): rs8. 2.Sangadala S. et al., 2007, J Biomol Struct Dyn. 25 (1): 11-23. 3.Riggins GJ. et al., 1996, Nat Genet. 13 (3): 347-9.

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