
Recombinant Human SMAD Family Member 4/SMAD4/DPC4 Protein(C-6His)**Cat.NO.: TP04629**

3th Edition

Synonyms: Mothers Against Decapentaplegic Homolog 4; MAD Homolog 4; Mothers Against DPP Homolog 4; Deletion Target in Pancreatic Carcinoma 4; SMAD Family Member 4; SMAD 4; Smad4; hSMAD4; SMAD4; DPC4; MADH4

Description: SMAD Family Member 4 (SMAD4) is a cytoplasmic protein that belongs to the Dwarfins/SMAD family. SMAD4 contains one MH1 (MAD homology 1) domain and one MH2 (MAD homology 2) domain. It is the component of the heterotrimeric SMAD2/SMAD3-SMAD4 complex that forms in the nucleus and is required for the TGF-mediated signaling. SMAD4 promotes binding of the SMAD2/SMAD4/FAST-1 complex to DNA and provides an activation function required for SMAD1 or SMAD2 to stimulate transcription. SMAD4 may act as a tumor suppressor. It positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator. Mutations or deletions in SMAD4 have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome.

Form: PBS

Molecular Weight: 61.5 kDa

Sequences: Met 1-Asp552

Purity: > 95% by HPLC

Concentration:

Endotoxin Level: <1.0 EU per 1 ug of protein (determined by LAL method)

Storage: Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C. Avoid repeated freezing and thawing cycles.