

Product datasheet for **TP762677**

SMAD4 (NM_005359) Human Recombinant Protein

Product data:

Product Type:	Recombinant Proteins
Description:	Purified recombinant protein of Human SMAD family member 4 (SMAD4)
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	A DNA sequence encoding the region(1Met-195Tyr) of SMAD4
Tag:	N-His
Predicted MW:	21.9 kDa
Concentration:	>0.05 µg/µL as determined by microplate BCA method
Purity:	> 80% as determined by SDS-PAGE and Coomassie blue staining
Buffer:	25 mM Tris-HCl, pH 8.0, 150 mM NaCl, 1% sarkosyl, 10% glycerol
Note:	For testing in cell culture applications, please filter before use. Note that you may experience some loss of protein during the filtration process.
Storage:	Store at -80°C after receiving vials.
Stability:	Stable for 12 months from the date of receipt of the product under proper storage and handling conditions. Avoid repeated freeze-thaw cycles.
RefSeq:	NP_005350
Locus ID:	4089
UniProt ID:	Q13485 , A0A024R274
RefSeq Size:	3220
Cytogenetics:	18q21.2
RefSeq ORF:	1656
Synonyms:	DPC4; JIP; MADH4; MYHRS



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Summary:

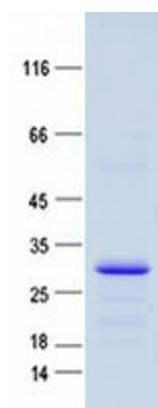
This gene encodes a member of the Smad family of signal transduction proteins. Smad proteins are phosphorylated and activated by transmembrane serine-threonine receptor kinases in response to transforming growth factor (TGF)-beta signaling. The product of this gene forms homomeric complexes and heteromeric complexes with other activated Smad proteins, which then accumulate in the nucleus and regulate the transcription of target genes. This protein binds to DNA and recognizes an 8-bp palindromic sequence (GTCTAGAC) called the Smad-binding element (SBE). The protein acts as a tumor suppressor and inhibits epithelial cell proliferation. It may also have an inhibitory effect on tumors by reducing angiogenesis and increasing blood vessel hyperpermeability. The encoded protein is a crucial component of the bone morphogenetic protein signaling pathway. The Smad proteins are subject to complex regulation by post-translational modifications. Mutations or deletions in this gene have been shown to result in pancreatic cancer, juvenile polyposis syndrome, and hereditary hemorrhagic telangiectasia syndrome. [provided by RefSeq, Aug 2017]

Protein Families:

Druggable Genome, Transcription Factors

Protein Pathways:

Adherens junction, Cell cycle, Chronic myeloid leukemia, Colorectal cancer, Pancreatic cancer, Pathways in cancer, TGF-beta signaling pathway, Wnt signaling pathway

Product images:

Purified recombinant protein SMAD4 was analyzed by SDS-PAGE gel and Coomassie Blue Staining.