

## 32-8168: Recombinant Human SMAD Family Member 4/SMAD4/DPC4 (C-6His)(Discontinued)

**Gene :** SMAD4  
**Gene ID :** 4089  
**Uniprot ID :** Q13485

### Description

Source: E. coli.  
MW :61.5kD.

Recombinant Human SMAD4 is produced by our E.coli expression system and the target gene encoding Met1-Asp552 is expressed with a 6His tag at the C-terminus. SMAD Family Member 4 (SMAD4) is a cytoplasmic protein that belongs to the Dwarfin/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.

### Product Info

**Amount :** 10 µg / 50 µg  
**Content :** Lyophilized from a 0.2 µm filtered solution of 20mM TrisHCl,pH8.0.  
**Storage condition :** Lyophilized protein should be stored at -20°C, though stable at room temperature for 3 weeks. Reconstituted protein solution can be stored at 4-7°C for 2-7 days. Aliquots of reconstituted samples are stable at -20°C for 3 months.  
**Amino Acid :** MDNMSITNTPTSDACLIVHSLMCHRQGGSETFKRAIESLVKKLKEKKDELDSLITAITTNGAHPSKCVTIQR  
TLDGRLQVAGRKGFPVHIYARLWRWPDHLKNEKHKVYCYAFDLKCDSCVNPYHYERVVSPGIDLSGLTLQ  
SNAPSSMMVKDEYVHDFEGQPSLSTEGHSIQTIQHPPSNRASTETYSTPALLAPSESATSTANFPNIPVASTSQ  
PASILGGSHSEGLLQIASGPQPGQQNGFTGQPATYHHNSTTTWTGSRTPYTPNLPHHQNGHLQHHPMPMP  
HPGHYWPVHNELAFQPPISNHPAPEYWCSIAFYFEMDVQVGETFKVPSSCPVTVDGYVDPSSGDRFCLGQLSN  
VHRTEAIERARLHIGKGVQLECKGEGDVWVRCLSDHAVFVQSYLDREAGRPGDAVHKIYPSAYIKVFDLRQ  
CHROMQQQAATAQAAAAAQAAGVAGNIPGPGSVGGIAPAISSAAAGIGVDDLRLRLCILRMSFVKGWGPDYP  
RQSIKETPCWIEIHLRALQLLDEVLTMPADIADPQPLDLEHHHHHH

### Application Note

Always centrifuge tubes before opening. Do not mix by vortex or pipetting. It is not recommended to reconstitute to a concentration less than 100 Åµg/ml. Dissolve the lyophilized protein in ddH<sub>2</sub>O. Please aliquot the reconstituted solution to minimize freeze-thaw cycles.

**Endotoxin :** Less than 0.1 ng/Åµg (1 IEU/Åµg) as determined by LAL test.