

## SMAD5 Protein

Full-length recombinant protein expressed in E. coli cells

**Catalog # S14-30G**

Lot # V060-2

### Product Description

Recombinant full-length human SMAD5 was expressed in E. coli cells using an N-terminal GST tag. The gene accession number is [NM\\_005903](#).

### Gene Aliases

Dwfc, JV5-1, MADH5, DKFZp781C1895, DKFZp781O1323

### Formulation

Recombinant protein stored in 50mM Tris-HCl, pH 7.5, 150mM NaCl, 0.25mM DTT, 0.1mM PMSF, 25% glycerol.

### Storage and Stability

Store product at  $-70^{\circ}\text{C}$ . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles.

### Scientific Background

SMAD5 is a member of the SMAD family and mediates signaling by the transforming growth factor-beta (TGF $\beta$ ) superfamily and related ligands (1). SMAD5 plays a critical role in the signaling pathway by which TGF $\beta$  inhibits the proliferation of human hematopoietic progenitor cells. SMAD5 is up-regulated in gastric epithelial cells during the infection of the pathogen *Helicobacter pylori* and it mediates apoptosis of gastric epithelial cells induced by H. pylori infection (2). In mature human B cells, bone morphogenetic protein 6 (BMP-6) inhibits cell growth and rapidly induces phosphorylation of SMADs 5 and 8.

### References

1. Heldin, C.H. et al: TGF-beta signalling from cell membrane to nucleus through SMAD proteins". *Nature*, 1997, **390** (6659): 465-71.
2. Nagasko, T. et al: Up-regulated Smad5 mediates apoptosis of gastric epithelial cells induced by *Helicobacter pylori* infection. *J Biol Chem*. 2003 Feb 14;278(7):4821-5.

### Purity



The purity of SMAD5 was determined to be **>85%** by densitometry. Approx. MW **82kDa**.

## SMAD5 Protein

Full-length recombinant protein expressed in E. coli cells

Catalog Number **S14-30G**

Specific Lot Number **V060-2**

Purity	>90%
Concentration	0.2 $\mu\text{g}/\mu\text{l}$
Stability	1yr at $-70^{\circ}\text{C}$ from date of shipment
Storage & Shipping	Store product at $-70^{\circ}\text{C}$ . For optimal storage, aliquot target into smaller quantities after centrifugation and store at recommended temperature. For most favorable performance, avoid repeated handling and multiple freeze/thaw cycles. Product shipped on dry ice.

To place your order, please contact us by phone 1-(604)-232-4600, fax 1-604-232-4601 or by email: [orders@signalchem.com](mailto:orders@signalchem.com)  
[www.signalchem.com](http://www.signalchem.com)

**FOR IN VITRO RESEARCH PURPOSES ONLY. NOT INTENDED FOR USE IN HUMAN OR ANIMALS.**