

Product Information

SMAD5, GST-tagged, human recombinant, expressed in *E. coli* cells

Catalog Number **SRP5134**
Storage Temperature -70°C

Synonyms: Dwfc, JV5-1, MADH5, DKFZp781C1895, DKFZp781O1323

Product Description

SMAD5 is a member of the SMAD family and mediates signaling by the transforming growth factor-beta (TGF β) superfamily and related ligands.¹ SMAD5 plays a critical role in the signaling pathway by which TGF β 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.

Recombinant, full-length, human SMAD5 was expressed in *E. coli* cells using an N-terminal GST tag. The gene accession number is NM_005903. Recombinant protein stored in 50 mM Tris-HCl, pH 7.5, 150 mM NaCl, 10 mM glutathione, 0.1 mM EDTA, 0.25 mM DTT, 0.1 mM PMSF, and 25% glycerol.

Molecular mass: ~82 kDa

Purity: 70–95% (SDS-PAGE, see Figure 1)

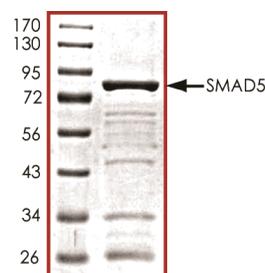
Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

The product ships on dry ice and storage at -70°C is recommended. After opening, aliquot into smaller quantities and store at -70°C . Avoid repeated handling and multiple freeze/thaw cycles.

Figure 1.
SDS-PAGE Gel of Typical Lot
70–95% (densitometry)



References

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

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