

Product datasheet for **AR09143PU-N**

SMAD4 (1-552, His-tag) Human Protein

Product data:

Product Type:	Recombinant Proteins
Description:	SMAD4 (1-552, His-tag) human recombinant protein, 0.5 mg
Species:	Human
Expression Host:	E. coli
Expression cDNA Clone or AA Sequence:	<u>MGSSHHHHHH SGLVPRGSH</u> MDNMSITNTP TSNDACLSIV HSLMCHRQGG ESETFAKRAI ESLVKKLKEK KDELDSLITA ITTNGAHP SK CVTIQRTLDG RLQVAGRKGF PHVIYARLWR WPD LHKNELK HVKYCQYAFD LKCD SVCVNP YHYERWSPG IDLSGLTLQS NAPSSMMVKD EYVHDFEGQP SLSTEGHSIQ TIQHPPSNRA STETYSTPAL LAPSES NATS TANFPNIPVA STSQPASILG GSHSEGLLQI ASGPQPGQQQ NGFTGQPATY HHNSTTTWTG SRTAPYTPNL PHHQNGHLQH HPPMPPHPGH YWPVHNELAF QPPISNHPAP EYWCSIAEFE MDVQVGETFK VPSSCPIVTV DGYVDPSSGD RFCLGQLSNV HRTEAIERAR LHIGKGVQLE CKGEGDVWVR CLSDHAVFVQ SYILDREAGR APGDAVHKIY PSAYIKVFDL RQCHRQMQQQ AATAQAAAAA QAAAVAGNIP GPGSVGGIAP AISLSAAAGI GVDDLRLRCI LRMSFVKGWG PDYPRQSIKE TPCWIEIHLH RALQLLDEVL HTMPIADPQP LD
Tag:	His-tag
Predicted MW:	62.6 kDa
Concentration:	lot specific
Purity:	>90% by SDS - PAGE
Buffer:	Presentation State: Purified State: Liquid purified protein Buffer System: 20 mM Tris-HCl buffer (pH 8.0) containing 20% glycerol
Preparation:	Liquid purified protein
Protein Description:	Recombinant SMAD4 protein, fused to His-tag, was expressed in E.coli and purified by using conventional chromatography techniques.
Storage:	Store undiluted at 2-8°C for up to two weeks or (in aliquots) at -20°C or -70°C for longer. Avoid repeated freezing and thawing.
Stability:	Shelf life: one year from despatch.
RefSeq:	<u>NP_005350</u>
Locus ID:	4089



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UniProt ID: [Q13485](#), [A0A024R274](#)

Cytogenetics: 18q21.2

Synonyms: DPC4; JIP; MADH4; MYHRS

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:

