

Product datasheet for TP300299

OriGene Technologies, Inc.

9620 Medical Center Drive, Ste 200 Rockville, MD 20850, US Phone: +1-888-267-4436 https://www.origene.com techsupport@origene.com EU: info-de@origene.com CN: techsupport@origene.cn

SMAD1 (NM_001003688) Human Recombinant Protein

Product data:

Product Type: Recombinant Proteins

Description: Recombinant protein of human SMAD family member 1 (SMAD1), transcript variant 2, 20 μg

Species: Human
Expression Host: HEK293T

Expression cDNA Clone >RC200299 protein sequence or AA Sequence: Red=Cloning site Green=Tags(s)

MNVTSLFSFTSPAVKRLLGWKQGDEEEKWAEKAVDALVKKLKKKKGAMEELEKALSCPGQPSNCVTIPRS LDGRLQVSHRKGLPHVIYCRVWRWPDLQSHHELKPLECCEFPFGSKQKEVCINPYHYKRVESPVLPPVLV PRHSEYNPQHSLLAQFRNLGQNEPHMPLNATFPDSFQQPNSHPFPHSPNSSYPNSPGSSSSTYPHSPTS

S

DPGSPFQMPADTPPPAYLPPEDPMTQDGSQPMDTNMMAPPLPSEINRGDVQAVAYEEPKHWCSIVYYE

LN

NRVGEAFHASSTSVLVDGFTDPSNNKNRFCLGLLSNVNRNSTIENTRRHIGKGVHLYYVGGEVYAECLSD SSIFVQSRNCNYHHGFHPTTVCKIPSGCSLKIFNNQEFAQLLAQSVNHGFETVYELTKMCTIRMSFVKGW

GAEYHRQDVTSTPCWIEIHLHGPLQWLDKVLTQMGSPHNPISSVS

TRTRPLEQKLISEEDLAANDILDYKDDDDKV

Tag: C-Myc/DDK
Predicted MW: 52.1 kDa

Concentration: $>0.05 \mu g/\mu L$ as determined by microplate BCA method

Purity: > 80% as determined by SDS-PAGE and Coomassie blue staining

Buffer: 25 mM Tris-HCl, 100 mM glycine, pH 7.3, 10% glycerol

Preparation: Recombinant protein was captured through anti-DDK affinity column followed by

conventional chromatography steps.

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.



RefSeq ORF:

SMAD1 (NM_001003688) Human Recombinant Protein - TP300299

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 001003688

 Locus ID:
 4086

 UniProt ID:
 Q15797

 RefSeq Size:
 2880

 Cytogenetics:
 4q31.21

Synonyms: BSP-1; BSP1; JV4-1; JV41; MADH1; MADR1

1395

Summary: The protein encoded by this gene belongs to the SMAD, a family of proteins similar to the

gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. SMAD proteins are signal transducers and transcriptional modulators that

mediate multiple signaling pathways. This protein mediates the signals of the bone

morphogenetic proteins (BMPs), which are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. In response to BMP ligands, this protein can be phosphorylated and activated by the BMP receptor kinase. The phosphorylated form of this protein forms a complex with SMAD4, which is important for its function in the transcription regulation. This protein is a target for SMAD-specific E3 ubiquitin ligases, such as SMURF1 and SMURF2, and undergoes ubiquitination and

proteasome-mediated degradation. Alternatively spliced transcript variants encoding the

same protein have been observed. [provided by RefSeq, Jul 2008]

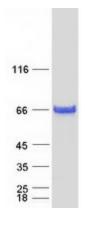
Protein Families: Cancer stem cells, Druggable Genome, ES Cell Differentiation/IPS, Stem cell relevant signaling

- JAK/STAT signaling pathway, Stem cell relevant signaling - TGFb/BMP signaling pathway,

Transcription Factors

Protein Pathways: TGF-beta signaling pathway

Product images:



Coomassie blue staining of purified SMAD1 protein (Cat# TP300299). The protein was produced from HEK293T cells transfected with SMAD1 cDNA clone (Cat# [RC200299]) using MegaTran 2.0 (Cat# [TT210002]).