

Recombinant human Smad2 protein

Catalog Number: ATGP0307

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-467aa

UniProt No.

Q15796

NCBI Accession No.

NP_005892.1

Alternative Names

Sma- and Mad-related protein 2 isoform 1, Sma- and Mad-related protein 2 isoform 1, hMAD-2, hSMAD2, JV18, JV18-1, MADH2, MADR2, Sma- and Mad-related protein 2 isoform 1 JV181, MAD, MAD Related Protein 2, SMAD2.

PRODUCT SPECIFICATION

Molecular Weight

54.4 kDa (487aa)

Concentration

0.5mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 0.1M NaCl, 20% glycerol

Purity

> 90% by SDS-PAGE

Endotoxin level

< 1 EU per 1ug of protein (determined by LAL method)

Tag

His-Tag

Application

SDS-PAGE

Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

BACKGROUND

Description

SMAD2 (Mothers against decapentaplegic homolog 2) belongs to the SMAD family of proteins that mediate signal transduction by the TGF-beta/activin/BMP-2/4 cytokine superfamily from receptor Ser/Thr protein kinases at the cell surface to the nucleus. Phosphorylated Smad2 is then able to form a complex with Smad4 or SARA. These

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complexes accumulate in the cell nucleus, where they are directly participating in the regulation of gene expression. Recombinant SMAD2 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography techniques.

Amino acid Sequence

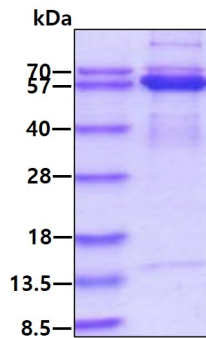
<MGSSHHHHHH SSGLVPRGSH> MSSILPFTPP VVKRLLGWKK SAGGSGGAGG GEQNGQEEKW CEKAVKSLVK
KLKKTGRLDE LEKAITTQNC NTKCVTIPST CSEIWGLSTP NTIDQWDTTG LYSFSEQTRS LDGRLQVSHR KGLPHVIYCR
LWRWPDLSH HELKAIENCE YAFNLKKDEV CVNPYHYQRV ETPVLPPVLV PRHTEILTEL PPLDDYTHSI PENTNFPAGI
EPQSNIYPET PPPGYISEDG ETSQQLNQS MDTGSPAELS PTTLSNVNHS LDLQPVTYSE PAFWCSIAYY ELNQRVGETF
HASQPSLTVD GFTDPSNSER FCLGLLSNVN RNATVEMTRR HIGRGVRLYY IGGEVFAECL SDSAIFVQSP NCNQRVWHP
ATVCKIPPGC NLKIFNNQEF AALLAQSVNQ GFEAVYQLTR MCTIRMSFVK GWGAEYRRQT VTSTPCWIEL HLNGLPLQWLD
KVLTMGSPS VRCSSMS

General References

Bonni., et al. (2001) *Nat. Cell Biol.* 3(6): 587-95.
Wotton, et al. (1999) *Cell.* 97(1): 29-39.

DATA

SDS-PAGE



3 μ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.