www.neobiolab.com info@neobiolab.com 888.754.5670, +1 617.500.7103 United States 0800.088.5164, +44 020.8123.1558 United Kingdom

## SMAD2 Human

Description: SMAD2 Human Recombinant produced in E.Coli is a single, non-glycosylated polypeptide chain containing 487 amino acids (1-467) and having a molecular mass of 54.4 kDa. SMAD2 is fused to 20 amino acid His-Tag at N-Terminus and purified by standard chromatography techniques.

Catalog #:PRPS-698

For research use only.

Synonyms: JV18, MADH2, MADR2, JV18-1, hMAD-2, hSMAD2, MGC22139, MGC34440, SMAD2, Mothers against decapentaplegic homolog 2, Mothers against DPP homolog 2, Mad-related protein 2, SMAD 2, SMAD family member 2.

Source: Escherichia Coli.

Physical Appearance: Sterile Filtered colorless solution.

Amino Acid Sequence: MGSSHHHHHH SSGLVPRGSH MSSILPFTPP VVKRLLGWKK SAGGSGGAGG GEQNGQEEKW CEKAVKSLVK KLKKTGRLDE LEKAITTQNC NTKCVTIPSTCSEIWGLSTP NTIDQWDTTG LYSFSEQTRS LDGRLQVSHR KGLPHVIYCR LWRWPDLHSH HELKAIENCE YAFNLKKDEV CVNPYHYQRV ETPVLPPVLVPRHTEILTEL PPLDDYTHSI PENTNFPAGI EPQS

Purity: Greater than 95.0% as determined by SDS-PAGE.

#### Formulation:

The SMAD2 protein solution contains 20mM Tris-HCl pH-8, and 100mM NaCl.

### Stability:

Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

# Usage:

NeoBiolab's products are furnished for LABORATORY RESEARCH USE ONLY. The product may not be used as drugs, agricultural or pesticidal products, food additives or household chemicals.

## Introduction:

SMAD2 is part of 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 complexes accumulate in the cell nucleus, where they are directly participating in the regulation of gene expression. SMAD2 mediates the signal of the TGF-beta, and therefore regulates multiple cellular processes, such as cell proliferation, apoptosis, and differentiation. SMAD2 is recruited to the TGF-beta receptors through its interaction with the SMAD anchor for receptor activation (SARA) protein. TGF-beta 1 acts on adjacent stromal cells to turn on SMAD2 signalling that could lead to stromal decidualization. SMAD2 is the downstream signal transducers of TGF-beta-1 in human dental pulp cells.

To place an order, please Click HERE.





