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Datasheet for ABIN7318785

SMAD2 Protein (His tag,DYKDDDDK Tag)

Overview

Quantity:	50 µg
Target:	SMAD2
Origin:	Human
Source:	Escherichia coli (E. coli)
Protein Type:	Recombinant
Purification tag / Conjugate:	This SMAD2 protein is labelled with His tag,DYKDDDDK Tag.

Product Details

Purpose:	Recombinant Human SMAD2 Protein (His & Flag Tag)
Sequence:	Ser2-Ser467
Characteristics:	Recombinant Human Mothers Against Decapentaplegic Homolog 2 is produced by our E.coli expression system and the target gene encoding Ser2-Ser467 is expressed with a 6His, Flag tag at the N-terminus.
Purity:	> 90 % as determined by reducing SDS-PAGE.
Endotoxin Level:	< 1.0 EU per µg as determined by the LAL method.

Target Details

Target:	SMAD2
Alternative Name:	SMAD2 (SMAD2 Products)
Background:	Background: Mothers against decapentaplegic homolog 2(SMAD2) is a cytoplasm protein which belongs to the dwarfin/SMAD family. Smad proteins undergo rapid nuclear translocation

Target Details

upon stimulation by transforming growth factor and in so doing transduce the signal into the nucleus. Receptor-regulated SMAD is an intracellular signal transducer and transcriptional modulator activated by TGF-beta and activin type 1 receptor kinases. SMAD2 contains 1 MH1 (MAD homology 1) domain and 1 MH2 (MAD homology 2) domain. It is expressed at high levels in skeletal muscle, endothelial cells, heart and placenta. It binds the TRE element in the promoter region of many genes that are regulated by TGF-beta and, on formation of the SMAD2/SMAD4 complex, activates transcription. It may act as a tumor suppressor in colorectal carcinoma. And SMAD2 positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.

Synonym: Mothers against decapentaplegic homolog 2, MAD homolog 2, Mad-related protein 2, hMAD-2, SMAD family member 2, SMAD 2, Smad2, Hsmad2, SMAD2, MADH2, MADR2

Molecular Weight: 54.6 kDa

UniProt: [Q15796](#)

Pathways: [Cell Division Cycle](#), [Hormone Transport](#), [Chromatin Binding](#), [Protein targeting to Nucleus](#)

Application Details

Restrictions: For Research Use only

Handling

Format: Lyophilized

Reconstitution: Please refer to the printed manual for detailed information.

Buffer: Lyophilized from a 0.2 µm filtered solution of 20 mM PB, 500 mM NaCl, pH 7.5.

Storage: 4 °C, -20 °C, -80 °C

Storage Comment: Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.