

Product datasheet

Recombinant Human MADH7/SMAD7 protein ab114358

[1 Image](#)

Description

Product name	Recombinant Human MADH7/SMAD7 protein	
Expression system	Wheat germ	
Accession	<u>O15105</u>	
Protein length	Protein fragment	
Animal free	No	
Nature	Recombinant	
Species	Human	
Sequence	CKVFRWPDLRHSSEVKRLCCCESYGKINPELVCCNPHHL SRLCELESPPP PYSRYPMDFLKPTADCPDAVPSSAETGGTNYLAPGGLSD SQLLEPGDRS H	
Predicted molecular weight	37 kDa including tags	
Amino acids	160 to 260	

Specifications

Our **Abpromise guarantee** covers the use of **ab114358** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Applications	ELISA SDS-PAGE Western blot
Form	Liquid

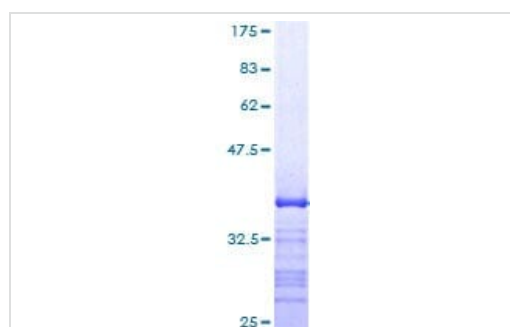
Preparation and Storage

Stability and Storage	Shipped on dry ice. Upon delivery aliquot and store at -80°C. Avoid freeze / thaw cycles. pH: 8.00 Constituents: 0.3% Glutathione, 0.79% Tris HCl
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General Info

Function	Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit TGF-beta (Transforming growth factor) and activin signaling by associating with their receptors thus preventing SMAD2 access. Functions as an adapter to recruit SMURF2 to the TGF-beta receptor complex. Also acts by recruiting the PPP1R15A-PP1 complex to TGFBR1, which promotes its dephosphorylation. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.
Tissue specificity	Ubiquitous with higher expression in the lung and vascular endothelium.
Involvement in disease	Colorectal cancer 3
Sequence similarities	Belongs to the dwarfin/SMAD family. Contains 1 MH1 (MAD homology 1) domain. Contains 1 MH2 (MAD homology 2) domain.
Post-translational modifications	Phosphorylation on Ser-249 does not affect its stability, nuclear localization or inhibitory function in TGFB signaling; however it affects its ability to regulate transcription (By similarity). Phosphorylated by PDPK1. Ubiquitinated by WWP1 (By similarity). Polyubiquitinated by RNF111, which is enhanced by AXIN1 and promotes proteasomal degradation. In response to TGF-beta, ubiquitinated by SMURF1; which promotes its degradation. Acetylation prevents ubiquitination and degradation mediated by SMURF1.
Cellular localization	Nucleus. Cytoplasm. Interaction with NEDD4L or RNF111 induces translocation from the nucleus to the cytoplasm (PubMed:16601693). TGF-beta stimulates its translocation from the nucleus to the cytoplasm. PDPK1 inhibits its translocation from the nucleus to the cytoplasm in response to TGF-beta (PubMed:17327236).

Images



12.5% SDS-PAGE showing ab114358 at approximately 36.74kDa stained with Coomassie Blue.

SDS-PAGE - Recombinant Human MADH7/SMAD7 protein (ab114358)

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

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