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ARG20572
anti-Smad 7 antibody

Package: 50 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Smad 7
Tested Reactivity	Hu
Predict Reactivity	Ms, Rat
Tested Application	WB
Specificity	This antibody detects SMAD6 at 53 kDa on SDS-PAGE immunoblots of human Jurkat cells and mouse C2C12. The antibody can used for western blot and immunohistochemistry.
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Smad 7
Species	Human
Immunogen	Synthetic peptides around aa. 12-29 (RLWRSRAPGGEDEEEGAG) and aa. 36-50 (ELRGEGATDSRAHGA) of Human SMAD7. This sequence is 100% or highly conserved between Human and multiple species.
Conjugation	Un-conjugated
Alternate Names	Mothers against decapentaplegic homolog 8; MADH8; MADH7; Smad7; Mothers against DPP homolog 7; Mothers against decapentaplegic homolog 7; hSMAD7; Mothers against DPP homolog 8; MAD homolog 8; CRCS3; SMAD 7; MAD homolog 7; SMAD family member 7

Application Instructions

Application table

Application	Dilution
WB	1:500

Application Note: WB: Antibody is suggested to be diluted in 5% skimmed milk/Tris buffer with 0.04% Tween20 and incubated for 1 hour at room temperature.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

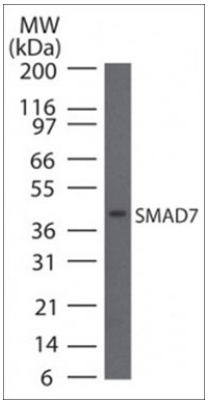
Form	Liquid
Purification	Purification with Protein G.
Buffer	100 µl PBS, 0.05% BSA and 0.05% Sodium azide
Preservative	0.05% Sodium azide
Stabilizer	0.05% BSA
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated

	freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Database links	GeneID: 4092 Human Swiss-port # O15105 Human
Gene Symbol	SMAD7
Gene Full Name	SMAD family member 7
Background	The protein encoded by this gene is a nuclear protein that binds the E3 ubiquitin ligase SMURF2. Upon binding, this complex translocates to the cytoplasm, where it interacts with TGF-beta receptor type-1 (TGFBR1), leading to the degradation of both the encoded protein and TGFBR1. Expression of this gene is induced by TGFBR1. Variations in this gene are a cause of susceptibility to colorectal cancer type 3 (CRCS3). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]
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 (By similarity). [UniProt]
Research Area	Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	46 kDa
PTM	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 (PubMed:14657019, PubMed:16601693). In response to TGF-beta, ubiquitinated by SMURF1; which promotes its degradation (PubMed:11278251). Acetylation prevents ubiquitination and degradation mediated by SMURF1.

Images



ARG20572 anti-Smad 7 antibody WB image

Western blot: Human HepG2 cells stained with ARG20572 anti-Smad 7 antibody at 1:250 dilution.