

ARG55591 anti-Smad 6 antibody

Package: 100 µl
Store at: -20°C

Summary

Product Description	Rabbit Polyclonal antibody recognizes Smad 6
Tested Reactivity	Hu
Predict Reactivity	Ms
Tested Application	FACS, WB
Host	Rabbit
Clonality	Polyclonal
Isotype	IgG
Target Name	Smad 6
Species	Human
Immunogen	KLH-conjugated synthetic peptide corresponding to aa. 358-386 (Center) of Human Smad 6.
Conjugation	Un-conjugated
Alternate Names	AOVD2; Smad6; MADH7; MADH6; Mothers against decapentaplegic homolog 6; Mothers against DPP homolog 6; hSMAD6; HsT17432; MAD homolog 6; SMAD 6; SMAD family member 6

Application Instructions

Application table	Application	Dilution
	FACS	1:10 - 1:50
	WB	1:1000
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HT-29	

Properties

Form	Liquid
Purification	Purification with Protein A and immunogen peptide.
Buffer	PBS and 0.09% (W/V) Sodium azide
Preservative	0.09% (W/V) Sodium azide
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.

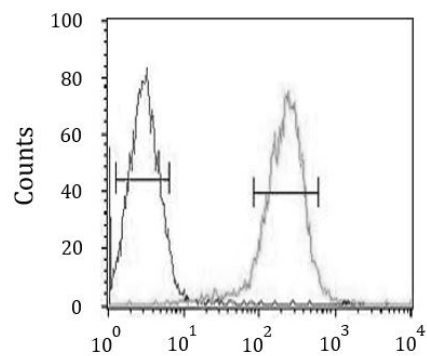
Database links	GeneID: 4091 Human Swiss-port # O43541 Human
Gene Symbol	SMAD6
Gene Full Name	SMAD family member 6
Background	The protein encoded by this gene belongs to the SMAD family of proteins, which are related to Drosophila 'mothers against decapentaplegic' (Mad) and C. elegans Sma. SMAD proteins are signal transducers and transcriptional modulators that mediate multiple signaling pathways. This protein functions in the negative regulation of BMP and TGF-beta/activin-signalling. Multiple transcript variants have been found for this gene.[provided by RefSeq, Sep 2014]
Function	Acts as a mediator of TGF-beta and BMP antiinflammatory activity. Suppresses IL1R-TLR signaling through its direct interaction with PEL1, preventing NF-kappa-B activation, nuclear transport and NF-kappa-B-mediated expression of proinflammatory genes. May block the BMP-SMAD1 signaling pathway by competing with SMAD4 for receptor-activated SMAD1-binding. Binds to regulatory elements in target promoter regions. [UniProt]
Research Area	Cell Biology and Cellular Response antibody; Developmental Biology antibody; Gene Regulation antibody; Signaling Transduction antibody
Calculated Mw	53 kDa
PTM	Phosphorylated by BMP type 1 receptor kinase and by PRKX. Monoubiquitinated at Lys-173 by the E2/E3 hybrid ubiquitin-protein ligase UBE2O, leading to reduced binding affinity for the activated BMP type I receptor ACVR1/ALK2, thereby enhancing BMP7 and regulating adipocyte differentiation (PubMed:23455153). Ubiquitinated by WWP1 (By similarity). Ubiquitinated by RNF165, promoting proteasomal degradation, leading to enhance the BMP-Smad signaling (By similarity). Arginine methylation by PRMT1, which is recruited by BMPR2, initiates BMP-Induced signaling and induces dissociation from the BMPR1B receptor at the cell surface leading to derepress downstream Smad1/Smad5 signaling.
Cellular Localization	Nucleus.

Images



ARG55591 anti-Smad 6 antibody WB image

Western blot: 35 µg of HT-29 cell lysate stained with ARG55591 anti-Smad 6 antibody.



ARG55591 anti-Smad 6 antibody FACS image

Flow Cytometry: HepG2 cells stained with ARG55591 anti-Smad 6 antibody (right histogram) or without primary antibody as control (left histogram), followed by incubation with FITC labelled secondary antibody.