10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-SMAD7 (AcK70) Antibody

Rabbit polyclonal antibody to SMAD7 (AcK70)
Catalog # AP61376

Product Information

Application	WB
Primary Accession	O15105
Other Accession	O35253
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	46426

Additional Information

Gene ID	4092
Other Names	MADH7; MADH8; Mothers against decapentaplegic homolog 7; MAD homolog 7; Mothers against DPP homolog 7; Mothers against decapentaplegic homolog 8; MAD homolog 8; Mothers against DPP homolog 8; SMAD family member 7; SMAD 7; Smad7; hSMAD7
Target/Specificity	Recognizes endogenous levels of SMAD7 (AcK70) protein.
Dilution	WB~~WB (1/500 - 1/1000)
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

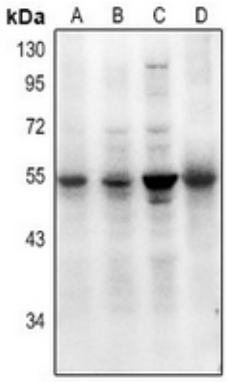
Name	SMAD7
Synonyms	MADH7, MADH8
Function	Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit TGF-beta (Transforming growth factor) and activin signaling by associating with their receptors thus preventing SMAD2 access (PubMed:21791611). 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.

Cellular Location	Nucleus. Cytoplasm. Note=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)
Tissue Location	Ubiquitous with higher expression in the lung and vascular endothelium

Background

KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SMAD7 (AcK70). The exact sequence is proprietary.

Images



Western blot analysis of SMAD7 (AcK70) expression in LOVO (A), HEK293T (B), A549 (C), mouse lung (D) whole cell lysates.