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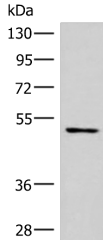
SMAD7 Polyclonal Antibody

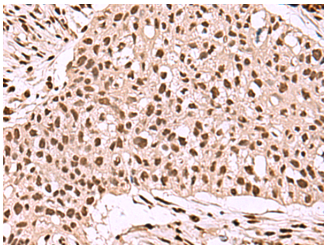
Catalog No.	E-AB-53271	**Reactivity**	H,M,R
Storage	Store at -20℃. Avoid freeze / thaw cycles.	**Host**	Rabbit
Applications	WB,IHC,ELISA	**Isotype**	IgG

Note: Centrifuge before opening to ensure complete recovery of vial contents.

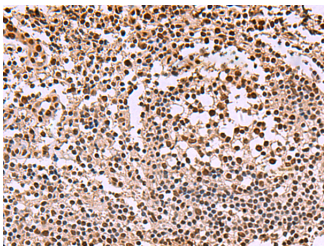
Images



Western blot analysis of Mouse heart tissue lysate using SMAD7 Polyclonal Antibody at dilution of 1:900



Immunohistochemistry of paraffin-embedded Human esophagus cancer tissue using SMAD7 Polyclonal Antibody at dilution of 1:40(×200)



Immunohistochemistry of paraffin-embedded Human tonsil tissue using SMAD7 Polyclonal Antibody at dilution of 1:40(×200)

Immunogen Information

Immunogen	Synthetic peptide of human SMAD7
Gene Accession	NP001177750
Swissprot	O15105
Synonyms	CRCS3,FLJ16482,hSMAD 7,hSMAD7,SMAD,mothers against DPP homolog 7,SMAD6,Smad7,SMAD7

Product Information

Calculated MW	46 kDa
Observed MW	Refer to figures
Buffer	PBS with 0.05% NaN3 and 40% Glycerol,pH7.4
Purify	Antigen affinity purification
Dilution	WB 1:500-1:2000, IHC 1:40-1:200, ELISA 1:5000-1:10000

Background

SMAD7,also named as Mothers against decapentaplegic homolog 7,is a 426 amino acid protein,which belongs to the dwarfin/SMAD family. SMAD7 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). SMAD7 as 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. SMAD7 functions as an adapter to recruit SMURF2 to the TGF-beta receptor complex and also acts by recruiting the PPP1R15A-PP1 complex to TGFBR1,which promotes its dephosphorylation. SMAD7 positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.