

# Immunotag™ Smad4 Antibody

Antibody Specification	
Catalog No.	ITA4153
Product Description	Immunotag™ Smad4 Antibody
Size	100 µg, 200 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	Smad4
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	WB,ELISA
Recommended Dilution	WB 1:500~1:1000
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	A synthesized peptide
Specificity	Smad4 Antibody detects endogenous levels of total Smad4
Purification	The antiserum was purified by peptide affinity chromatography.
Form	Rabbit IgG in phosphate buffered saline , pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol.Store at -20 °C.Stable for 12 months from date of receipt
Gene Name	SMAD4
Accession No.	Q13485

## Antibody Specification

Alternate Names	(Small) Mothers Against Decapentaplegic; Deleted in Pancreatic Carcinoma 4; Deleted in Pancreatic Carcinoma; Deleted in pancreatic carcinoma locus 4; Deletion target in pancreatic carcinoma 4; DPC 4; DPC4; hSMAD4; JIP; MAD homolog 4; MAD mothers against decapentaplegic Drosophila homolog 4; MAD mothers against decapentaplegic homolog 4; MADH 4; MADH4; Med; Medea; Mothers against decapentaplegic homolog 4; Mothers against decapentaplegic, Drosophila, homolog of, 4; Mothers against DPP homolog 4; MYHRS; OTTHUMP00000163548; SMA- and MAD-related protein 4; SMAD 4; SMAD family member 4; SMAD mothers against DPP homolog 4; SMAD4; SMAD4_HUMAN;
Description	In muscle physiology, plays a central role in the balance between atrophy and hypertrophy. When recruited by MSTN, promotes atrophy response via phosphorylated SMAD2/4. MSTN decrease causes SMAD4 release and subsequent recruitment by the BMP pathway to promote hypertrophy via phosphorylated SMAD1/5/8. Acts synergistically with SMAD1 and YY1 in bone morphogenetic protein (BMP)-mediated cardiac-specific gene expression. Binds to SMAD binding elements (SBEs) (5'-GTCT/AGAC-3') within BMP response element (BMPRE) of cardiac activating regions (By similarity). Common SMAD (co-SMAD) is the coactivator and mediator of signal transduction by TGF-beta (transforming growth factor). Component of the heterotrimeric SMAD2/SMAD3-SMAD4 complex that forms in the nucleus and is required for the TGF-mediated signaling. Promotes binding of the SMAD2/SMAD4/FAST-1 complex to DNA and provides an activation function required for SMAD1 or SMAD2 to stimulate transcription. Component of the multimeric SMAD3/SMAD4/JUN/FOS complex which forms at the AP1 promoter site; required for synergistic transcriptional activity in response to TGF-beta. May act as a tumor suppressor. Positively regulates PDPK1 kinase activity by stimulating its dissociation from the 14-3-3 protein YWHAQ which acts as a negative regulator.
Cell Pathway/ Category	Primary Polyclonal Antibody
Protein MW	60 KD
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.