

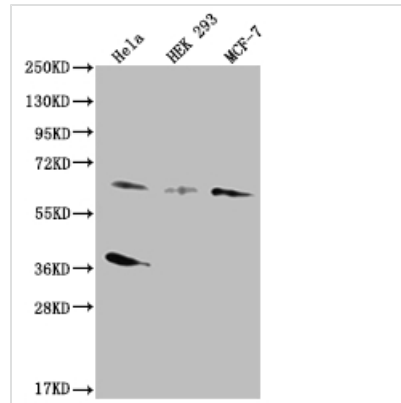


SMAD4 Recombinant Monoclonal Antibody

Product Code	CSB-RA551397A0HU
Storage	Upon receipt, store at -20°C or -80°C. Avoid repeated freeze.
Uniprot No.	Q13485
Immunogen	A synthesized peptide derived from human SMAD4
Species Reactivity	Human
Tested Applications	ELISA, WB; Recommended dilution: WB:1:500-1:2000
Relevance	<p>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 (PubMed:25514493). 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. {ECO:0000250, ECO:0000269 PubMed:17327236, ECO:0000269 PubMed:25514493, ECO:0000269 PubMed:9389648}.</p>
Form	Liquid
Conjugate	Non-conjugated
Storage Buffer	Rabbit IgG in 10mM phosphate buffered saline , pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Purification Method	Affinity-chromatography
Isotype	Rabbit IgG
Clonality	Monoclonal
Product Type	Recombinant Antibody
Immunogen Species	Homo sapiens (Human)
Research Area	Epigenetics and Nuclear Signaling; Cancer; Cardiovascular; Metabolism; Signal transduction; Stem cells
Target Names	SMAD4

**Clone No.**

22H12

Image

Western Blot

Positive WB detected in: HeLa whole cell lysate, HEK293 whole cell lysate, MCF-7 whole cell lysate

All lanes: SMAD4 antibody at 1:500

Secondary

Goat polyclonal to rabbit IgG at 1/50000 dilution

Predicted band size: 61 kDa

Observed band size: 55-72 kDa

Usage

For Research Use Only. Not for use in diagnostic or therapeutic procedures.