

SMAD4 Monoclonal Antibody (SMD46 (DCS-46))

Product Details	
Size	500 µL
Species Reactivity	Human
Published Species	Mouse
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	SMD46 (DCS-46)
Conjugate	Unconjugated
Immunogen	Purified recombinant DPC4 protein
Form	Liquid
Concentration	0.2 mg/mL
Purification	Protein G
Storage buffer	PBS, pH 7.4, with 0.2% BSA
Contains	0.09% sodium azide
Storage conditions	4° C
RRID	AB_10985443

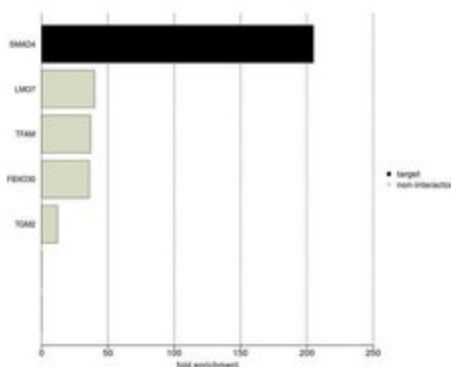
Applications	Tested Dilution	Publications
Western Blot (WB)	1-2 µg/mL	1 Publication
Immunocytochemistry (ICC/IF)	Assay-dependent	-
Immunoprecipitation (IP)	2 µg/mL	-
Miscellaneous PubMed (Misc)	-	2 Publications

Product Specific Information

MA5-14300 targets SMAD4 in IF, IP, and WB applications and shows reactivity with Human samples.

The MA5-14300 immunogen is purified recombinant DPC4 protein.

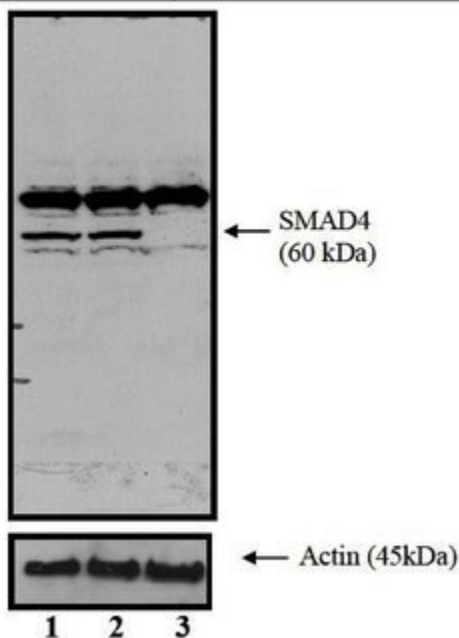
Advanced Verification Data



SMAD4 Antibody (MA5-14300)

IP-MS enrichment of SMAD4 (LFQ intensity): SMAD4 was enriched 205-fold from HeLa lysate compared to background proteins, using the optimized IP-MS workflow with Pierce MS-Compatible Magnetic IP Kit protein A/G (Product # 90409) and SMAD4 antibody (Product # MA5-14300). The STRING database (www.string-db.org) was used to identify the protein interactor list. See more information on IP-MS verification of antibody selectivity. IP-MS validation info.

Product Images For SMAD4 Monoclonal Antibody (SMD46 (DCS-46))

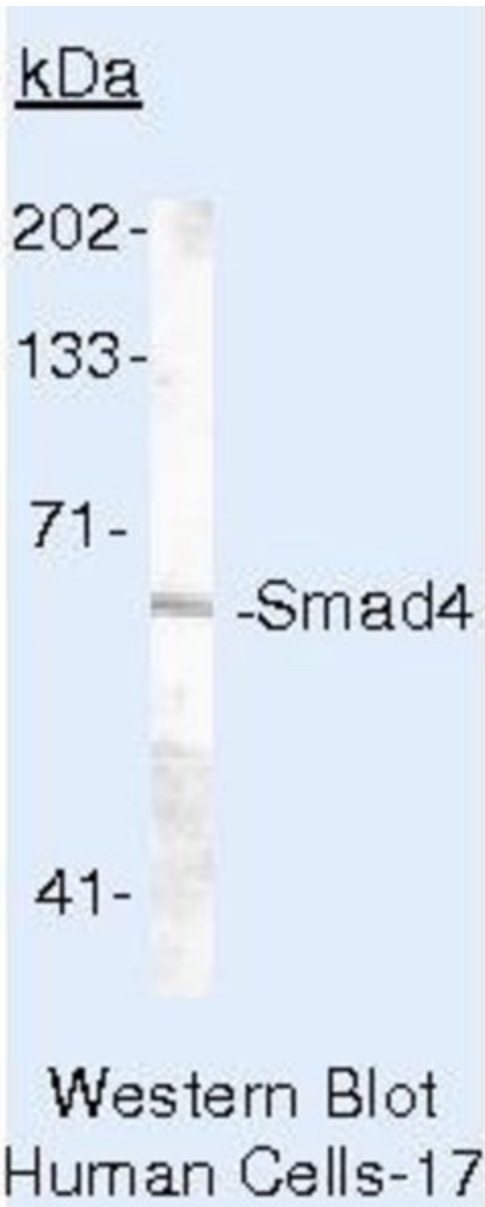


SMAD4 Antibody (MA5-14300) in WB

Western blot analysis of SMAD4 was performed with 10 μ g of HeLa cells transfected with Transfection Reagent alone (Lane 1), 100nM Non-Targeting control siRNA (Lane 2), or 100nM siRNA against SMAD4 (Lane 3). Proteins were resolved using a NuPAGE® Novex 4-12% Bis-Tris Gel (Product # NP0322BOX), XCell SureLock™ Electrophoresis System (Product # EI0002), and a protein size ladder. Proteins were wet transferred to a Pierce Nitrocellulose Membrane (Product # 88025) OR Pierce PVDF Membrane (Product # 88518) and blocked with Pierce Starting Block T20 (PBS) Blocking Buffer (Product # 37539) for 1 hour at room temperature. SMAD4 was detected at ~ 60 kDa using SMAD4 Mouse monoclonal antibody (Product # MA5-14300) diluted in Pierce Starting Block T20 (PBS) Blocking Buffer 4°C overnight on a rocking platform. Pierce Goat Anti-Mouse (Product # 31437) HRP-Conjugated Antibodies at a 1:2500 dilution were used and chemiluminescent detection was performed using Pierce Supersignal West Dura Maximum Sensitivity Substrate (Product # 37071). Relative density of the bands normalized to Actin (45 kDa). SMAD4 Antibody (Product # MA5-14300) confirms silencing of SMAD4 expression.

SMAD4 Antibody (MA5-14300) in WB

Western blot of SMAD4 using SMAD4 Monoclonal Antibody (Product # MA5-14300) on LS174T Cells.



[View more figures on thermofisher.com](https://www.thermofisher.com)

3 References

Western Blot (1)

Molecular pharmacology

Pyruvate Dehydrogenase Kinase 4 Deficiency Results in Expedited Cellular Proliferation through E2F1-Mediated Increase of Cyclins.

"MA514300 was used in western blot to look for potential tumor suppressors and examine their function as cell cycle modulators and investigate their impact on the cyclin family of proteins and cyclin dependent kinases"

Authors: Choiniere J,Wu J,Wang L

Species
Mouse

Dilution
Not Cited

Year
2017

Miscellaneous PubMed (2)

Acta biochimica et biophysica Sinica

Effect of DPC4 gene on invasion and metastasis of colorectal carcinoma cells.

"MA5-14300 was used in immunohistochemistry and western blot to study the role of the DPC4 gene on invasion and metastasis of colorectal carcinoma cells"

Authors: Xiao DS,Wen JF,Li JH,Wang KS,Hu ZL,Zhou JH,Deng ZH,Liu Y

Species
Not Applicable

Dilution
Not Cited

Year
2006

Mechanisms of development

Notch signaling modulates the nuclear localization of carboxy-terminal-phosphorylated smad2 and controls the competence of ectodermal cells for activin A.

"MA5-14300 was used in immunoprecipitation and western blot to investigate the regulation of the onset of loss of mesodermal competence by Notch signaling during Xenopus development"

Authors: Abe T,Furue M,Kondow A,Matsuzaki K,Asashima M

Species
Not Applicable

Dilution
Not Cited

Year
2005

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