SMAD4 Monoclonal Antibody (4G1C6)

Product Details	
Size	100 µL
Species Reactivity	Human, Mouse
Published Species	Human
Host/Isotype	Mouse / IgG1
Class	Monoclonal
Type	Antibody
Clone	4G1C6
Conjugate	Unconjugated
Immunogen	Purified recombinant fragment of human SMAD4 expressed in E. Coli.
Form	Liquid
Concentration	Conc. Not Determined
Storage buffer	ascites
Contains	0.03% sodium azide
Storage conditions	Store at 4°C short term. For long term storage, store at -20°C, avoiding freeze/thaw cycles.
RRID	AB_10986059

Applications	Tested Dilution	Publications
Western Blot (WB)	1:500-1:2,000	-
Immunohistochemistry (Paraffin) (IHC (P))	1:200-1:1,000	1 Publication
Immunocytochemistry (ICC/IF)	1:200-1:1,000	-
Flow Cytometry (Flow)	1:200-1:400	-
ELISA (ELISA)	1:10,000	-
in situ PLA (PLA)	-	1 Publication

Product Specific Information

MA5-15682 targets SMAD4 in indirect ELISA, FACS, IF, IHC, and WB applications and shows reactivity with Human samples.

The MA5-15682 immunogen is purified recombinant fragment of human SMAD4 expressed in E. Coli.

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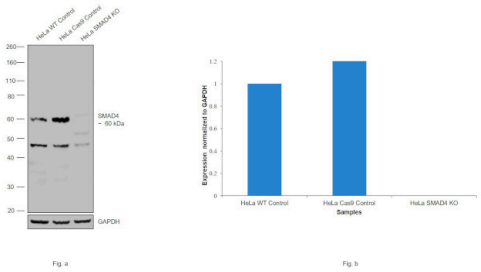
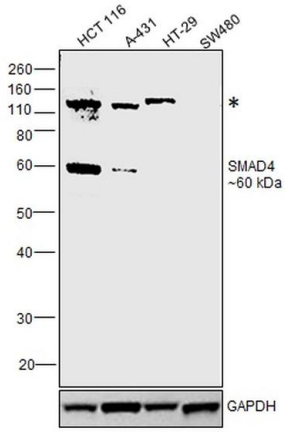
MA5-15682 detects SMAD4 which has a predicted molecular weight of approximately 65kDa.

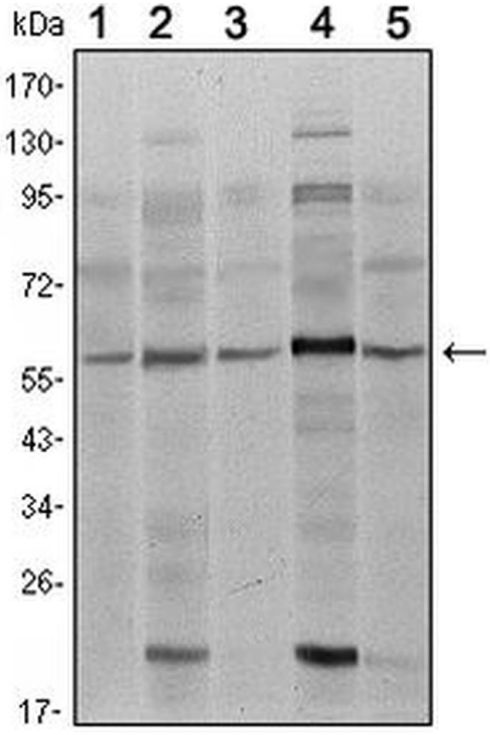
Product Images For SMAD4 Monoclonal Antibody (4G1C6)



SMAD4 Antibody (MA5-15682)
Antibody specificity was demonstrated by CRISPR-Cas9 mediated knockout of target protein. A loss of signal was observed for target protein in SMAD4 KO cell line compared to control cell line using Anti-SMAD4 Monoclonal Antibody (4G1C6) (Product # MA5-15682). {KO}



SMAD4 Antibody (MA5-15682) in WB
Western blot was performed using Anti-SMAD4 Monoclonal Antibody (4G1C6) (Product # MA5-15682) and a 60 kDa band corresponding to Mothers against decapentaplegic homolog 4, along with an uncharacterized band(*), was observed across positive cell lines (HCT 116 and A-431) and not across negative cell lines (HT-29 and SW480) tested. Whole cell extracts (30 µg lysate) of HCT 116 (Lane 1), A-431 (Lane 2), HT-29 (Lane 3) and SW480 (Lane 4) were electrophoresed using NuPAGE™ 10% Bis-Tris Protein Gel (Product # NP0301BOX). Resolved proteins were then transferred onto a Nitrocellulose membrane (Product # IB23001) by iBlot® 2 Dry Blotting System (Product # IB21001). The blot was probed with the primary antibody (1:1000 dilution) and detected by chemiluminescence with Goat anti-Mouse IgG (H+L) Superclonal™ Recombinant Secondary Antibody, HRP (Product # A28177, 1:4000 dilution) using the iBright FL 1000 (Product # A32752). Chemiluminescent detection was performed using Novex® ECL Chemiluminescent Substrate Reagent Kit (Product # WP20005).



SMAD4 Antibody (MA5-15682) in WB
Western blot analysis of SMAD4 using SMAD4 monoclonal antibody (Product # MA5-15682) in A431 (1), SK-N-SH (2), K562 (3), HepG2 (4) and HUVE12 (5) cell lysate.

View more figures on thermofisher.com

2 References

Immunohistochemistry (Paraffin) (1)

Aging

MiR-34a-3p alters proliferation and apoptosis of meningioma cells *in vitro* and is directly targeting SMAD4, FRAT1 and BCL2.

"MA515682 was used in immunohistochemistry - paraffin section to report that SMAD4, FRAT1, and BCL2 are direct targets of miR-34a-3p and miR-34a-3p dysregulation modulates proliferation and apoptosis of meningioma cells"

Authors: Werner TV,Hart M,Nickels R,Kim YJ,Menger MD,Bohle RM,Keller A,Ludwig N,Meese E

Year
2017

Species
Human

in situ PLA (1)

Frontiers in physiology

Operation of the Atypical Canonical Bone Morphogenetic Protein Signaling Pathway During Early Human Odontogenesis.

"MA5-15682 was used in Proximity Ligation Assay (PLA) to investigate whether this atypical BMP canonical signaling is conserved in human odontogenesis."

Authors: Hu X,Lin C,Ruan N,Huang Z,Zhang Y,Hu X

Year
2022

Species
Human