[KO Validated] Smad4 Monoclonal Antibody

CAB19116

Description

This [KO Validated] Smad4 Monoclonal Antibody is supplied as a kit for advanced applications. The kit includes Bradford Reagent to quantify total protein concentration for accurate sample normalization (Optional).

Product Information

SKU:	CAB19116
Contents:	20 µL, 100 µL Bradford Reagent: 1 vial (2ml)
Category:	Monoclonal Antibody
Synonyms:	JIP, DPC4, MADH4, MYHRS, d4
Clone:	ARC5009-06
Applications:	WB IHC-P IP ChIP ELISA CUT&Tag
Conjugation:	Unconjugated
Reactivity:	Human, Mouse, Rat

Antibody Data

Gene ID:	4089
Uniprot:	AB_2862609
Host Species:	Rabbit
Purification:	Affinity purification
Observed MW:	70kDa
Calculated MW:	60kDa

Preparation & Storage

Storage: Store at -20°C. Avoid freeze / thaw cycles. Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.

Store Bradford Reagent at Room Temperature for 1 Year.

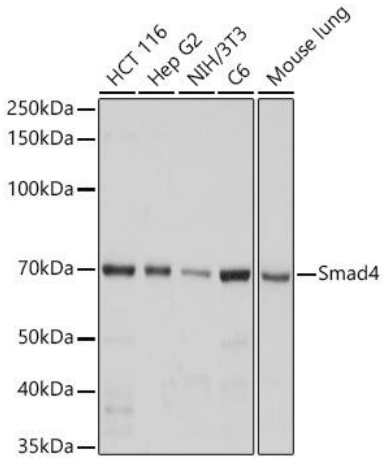
Positive Sample: 293T, HCT 116, HepG2, C6, NIH/3T3, Mouse lung

Recommended Dilutions:

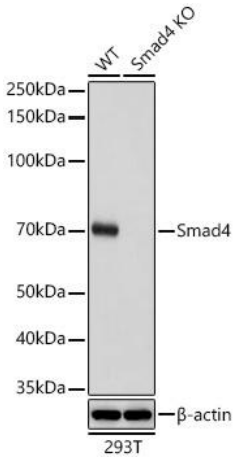
WB	1:1000 - 1:6000
IHC-P	1:500 - 1:2000
IP	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
ELISA	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements. ChIP 5µg antibody for 10µg-15µg of Chromatin CUT&Tag 10^5 cells /1 µg

Protein Quantification (Optional): To quantify total protein levels, use the Bradford Reagent included in this kit. Visit https://www.assaygenie.com/bradford-protein-assay-protocol/ to view the full protocol

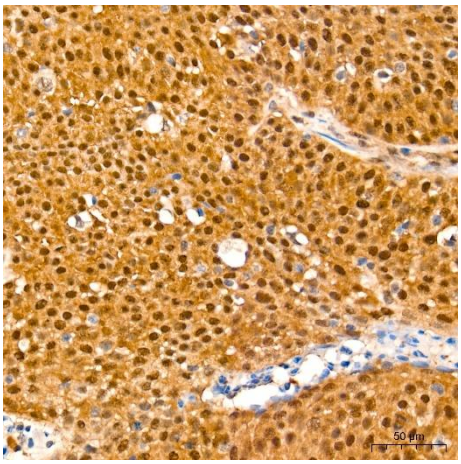
Validation Data



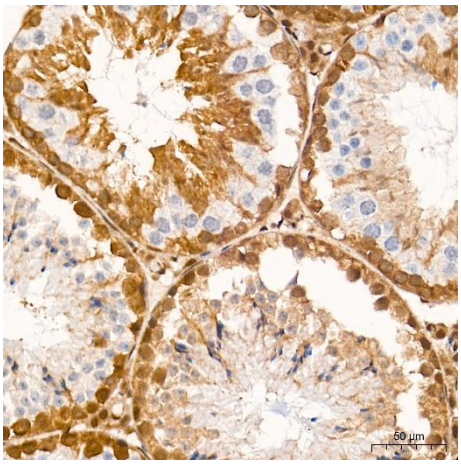
Western blot analysis of various lysates using [KO Validated] Smad4 Rabbit mAb (CAB19116) at 1:1000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (AbGn00020). Exposure time: 3s.



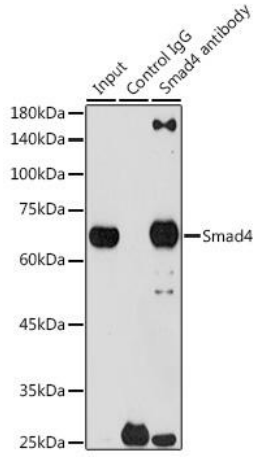
Western blot analysis of lysates from wild type (WT) and Smad4 knockout (KO) 293T cells using [KO Validated] Smad4 Rabbit mAb (CAB19116) at 1:1000 dilution incubated overnight at 4℃. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25 µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (AbGn00020). Exposure time: 3s.



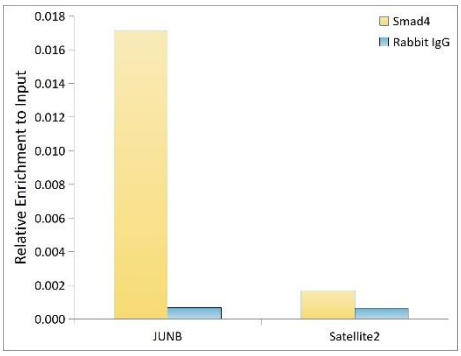
Immunohistochemistry analysis of paraffin-embedded Human cervix cancer tissue using [KO Validated] Smad4 Rabbit mAb (CAB19116) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



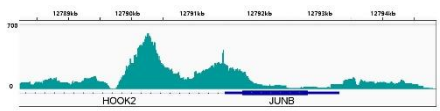
Immunohistochemistry analysis of paraffin-embedded Mouse testis tissue using [KO Validated] Smad4 Rabbit mAb (CAB19116) at a dilution of 1:500 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunoprecipitation analysis of 300 µg extracts of 293T cells using 3 µg Smad4 antibody (CAB19116). Western blot was performed from the immunoprecipitate using Smad4 antibody (CAB19116) at a dilution of1:1000.



Chromatin immunoprecipitation analysis of extracts of HepG2 cells, using [KO Validated] Smad4 Rabbit mAb (CAB19116) and rabbit IgG.The amount of immunoprecipitated DNA was checked by quantitative PCR. Histogram was constructed by the ratios of the immunoprecipitated DNA to the input.



CUT&Tag was performed using the CUT&Tag Assay Kit (pAG-Tn5) for Illumina from10^5 with 1 µg of [KO Validated] Smad4 Rabbit mAb (CAB19116), followed by incubation with Goat Anti-Rabbit IgG(H+L)(CABS070).The results denote the enrichment pattern of Smad4 around JUNB gene.