

## [KO Validated] Smad2 Monoclonal Antibody

CAB19114

### Description

---

This [KO Validated] Smad2 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

---

<b>SKU:</b>	CAB19114
<b>Contents:</b>	20 $\mu$ L, 100 $\mu$ L Bradford Reagent: 1 vial (2ml)
<b>Category:</b>	Monoclonal Antibody
<b>Synonyms:</b>	JV18, LDS6, CHTD8, MADH2, MADR2, JV18-1, hMAD-2, hSMAD2, [KD Validated] Smad2
<b>Clone:</b>	ARC0343
<b>Applications:</b>	<span>WB</span> <span>IF/ICC</span> <span>IP</span> <span>ELISA</span>
<b>Conjugation:</b>	Unconjugated
<b>Reactivity:</b>	Human, Mouse, Rat

### Antibody Data

---

<b>Gene ID:</b>	4087
<b>Uniprot:</b>	AB_2862607
<b>Host Species:</b>	Rabbit
<b>Purification:</b>	Affinity purification
<b>Observed MW:</b>	60kDa
<b>Calculated MW:</b>	52kDa

## 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.

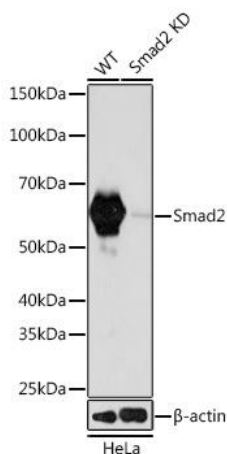
**Positive Sample:** HeLa, HT-29, Jurkat, NIH/3T3, Rat lung, PC-12

**Recommended Dilutions:**

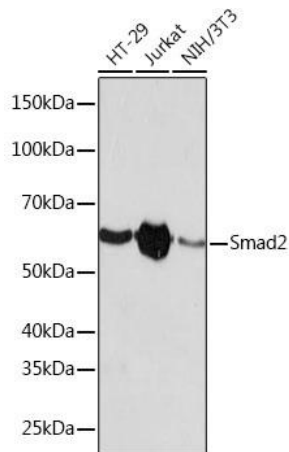
<b>WB</b>	1:1000 - 1:2000
<b>IF/ICC</b>	1:100 - 1:400
<b>IP</b>	0.5µg-4µg antibody for 200µg-400µg extracts of whole cells
<b>ELISA</b>	Recommended starting concentration is 1 µg/mL. Please optimize the concentration based on your specific assay requirements.

**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

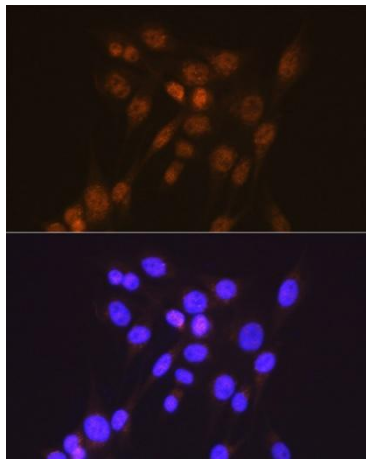
## Validation Data



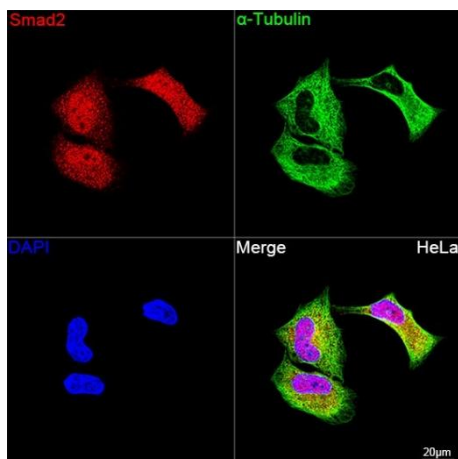
Western blot analysis of lysates from wild type (WT) and Smad2 knockdown (KD) HeLa cells using [KD Validated] Smad2 Rabbit mAb (CAB19114) at 1:1000 dilution incubated overnight at 4°C. Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (CABS014) at 1:10000 dilution. Lysates/proteins: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (AbGn00020). Exposure time: 60s.



Western blot analysis of various lysates using [KD Validated] Smad2 Rabbit mAb (CAB19114) 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: 25µg per lane. Blocking buffer: 3% nonfat dry milk in TBST. Detection: ECL Basic Kit (AbGn00020). Exposure time: 90s.



Immunofluorescence analysis of NIH/3T3 cells using [KD Validated] Smad2 Rabbit mAb (CAB19114) at a dilution of 1:100 (40x lens). Secondary antibody: Cy3 Goat anti-Rabbit IgG (H+L) (CABS007) at 1:500 dilution. Blue: DAPI for nuclear staining.



Confocal imaging of HeLa cells using [KD Validated] Smad2 Rabbit mAb (CAB19114, dilution 1:100) followed by a further incubation with Cy3 Goat Anti-Rabbit IgG (H+L) (CABS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (CABC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.