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[KO Validated] Smad3 Rabbit mAb

Catalog No.: A29345 KO Validated Recombinant

Basic Information

Observed MW
52 kDa

Calculated MW
48 kDa

Category
Primary antibody

Applications
WB,IF/ICC,IF-F,IHC-P,ELISA

Cross-Reactivity
Human, Mouse, Rat

CloneNo number
ARC81485

Background

Enables several functions, including DNA binding activity; DNA-binding transcription activator activity, RNA polymerase II-specific; and promoter-specific chromatin binding activity. Involved in several processes, including cellular response to virus; negative regulation of osteoblast proliferation; and positive regulation of chondrocyte differentiation. Acts upstream of or within several processes, including cell surface receptor protein serine/threonine kinase signaling pathway; embryonic morphogenesis; and regulation of DNA-templated transcription. Located in cytoplasm; nucleus; and plasma membrane. Is expressed in several structures, including alimentary system; central nervous system; early conceptus; genitourinary system; and limb. Used to study osteoarthritis. Human ortholog(s) of this gene implicated in Loeys-Dietz syndrome 3; Lynch syndrome; and pancreatic cancer. Orthologous to human SMAD3 (SMAD family member 3).

Recommended Dilutions

WB	1:4000 - 1:10000
IF/ICC	1:200 - 1:1000
IF-F	1:200 - 1:1000
IHC-P	1:200 - 1:800
ELISA	Recommended starting concentration is 1 μg/mL. Please optimize the concentration based on your specific assay requirements. For high-ratio antibody dilutions (≥1:10000)，a sequential dilution method is strongly recommended to ensure measurement accuracy.

Immunogen Information

Gene ID
17127

Swiss Prot
Q8BUN5

Immunogen
Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms
Madh3

Product Information

Source
Rabbit

Isotype
IgG

Purification
Affinity purification

Storage
Store at -20℃. Avoid freeze / thaw cycles.
Buffer: PBS with 0.09% Sodium azide,0.05% BSA,50% glycerol,pH7.3.

Contact

400-999-6126

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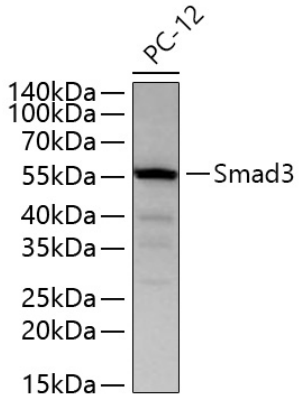
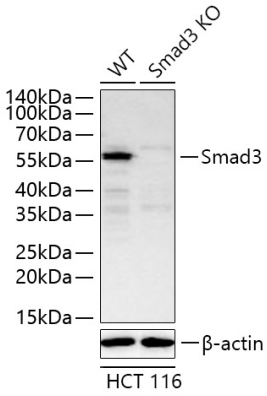
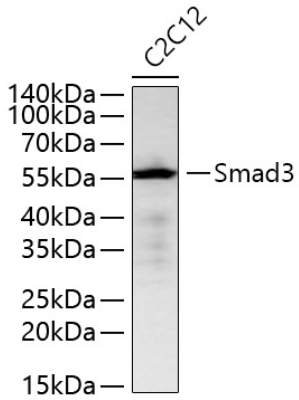
Validation Data



Western blot analysis of lysates from PC-12 cells using [KO Validated] Smad3 Rabbit mAb (A29345) at 1:10000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 60 s.

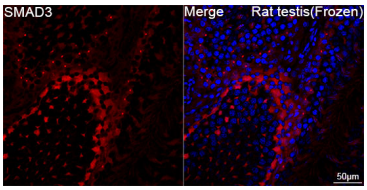


Western blot analysis of lysates from wild type (WT) and Smad3 knockout (KO) HCT 116 cells using [KO Validated] Smad3 Rabbit mAb (A29345) at 1:10000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90 s.

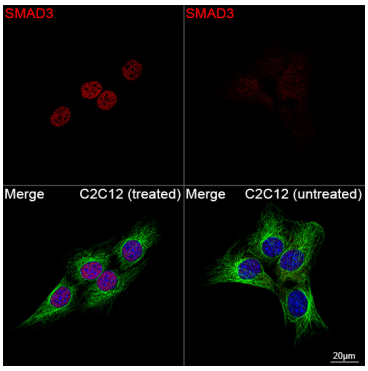


Western blot analysis of lysates from C2C12 cells using [KO Validated] Smad3 Rabbit mAb (A29345) at 1:10000 dilution incubated overnight at 4℃.
Secondary antibody: HRP-conjugated Goat anti-Rabbit IgG (H+L) (AS014) at 1:10000 dilution.
Lysates/proteins: 25 µg per lane.
Blocking buffer: 3% nonfat dry milk in TBST.
Detection: ECL Basic Kit (RM00020).
Exposure time: 90 s.

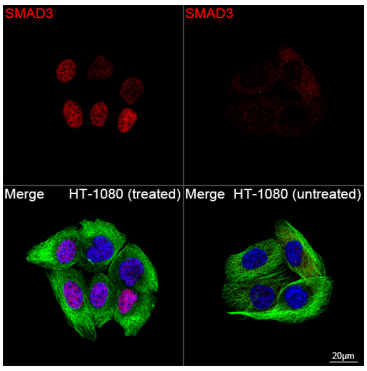
Validation Data



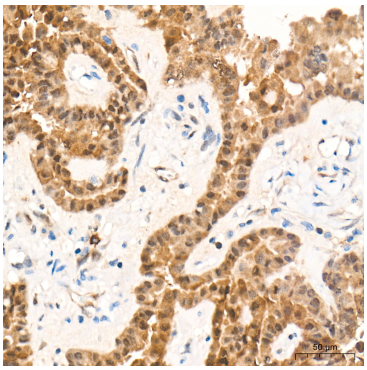
Confocal imaging of frozen sections of Rat testis tissue using [KO Validated] Smad3 Rabbit mAb (A29345, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). DAPI was used for nuclear staining (Blue). Microwave antigen retrieval performed with 0.01M Citrate Buffer (pH 6.0) prior to IF staining. Objective: 40x.



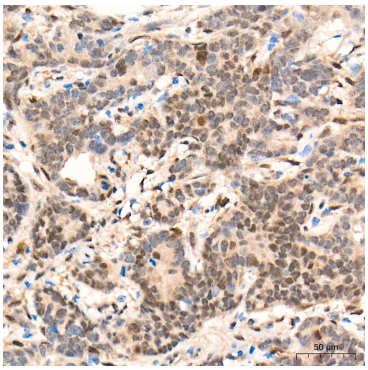
Confocal imaging of C2C12 cells (treated with mTGFβ1) and C2C12 cells (untreated) using [KO Validated] Smad3 Rabbit mAb (A29345, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



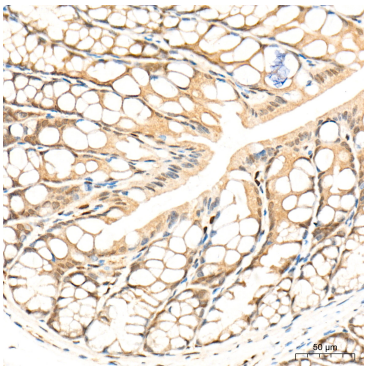
Confocal imaging of HT-1080 cells (treated with TGFβ) and HT-1080 cells (untreated) using [KO Validated] Smad3 Rabbit mAb (A29345, dilution 1:1000) followed by a further incubation with Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007, dilution 1:500) (Red). The cells were counterstained with α-Tubulin Mouse mAb (AC012, dilution 1:400) followed by incubation with ABflo® 488-conjugated Goat Anti-Mouse IgG (H+L) Ab (AS076, dilution 1:500) (Green). DAPI was used for nuclear staining (Blue). Objective: 100x.



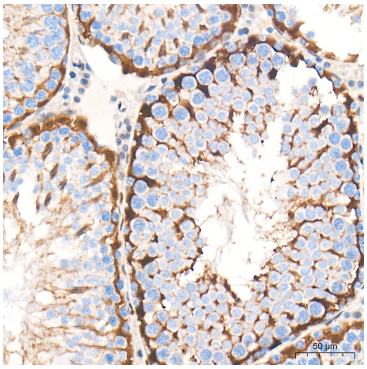
Immunohistochemistry analysis of paraffin-embedded Human thyroid cancer tissue using [KO Validated] Smad3 Rabbit mAb (A29345) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



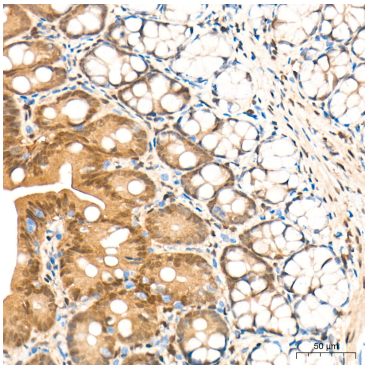
Immunohistochemistry analysis of paraffin-embedded Human colon carcinoma tissue using [KO Validated] Smad3 Rabbit mAb (A29345) at a dilution of 1:200 (40x lens). High pressure antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse colon tissue using [KO Validated] Smad3 Rabbit mAb (A29345) at a dilution of 1:200 (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] Smad3 Rabbit mAb (A29345) at a dilution of 1:200 (40x lens). High pressure



Immunohistochemistry analysis of paraffin-embedded Rat intestine tissue using [KO Validated] Smad3 Rabbit mAb (A29345) at a dilution of 1:200 (40x lens). High pressure

Validation Data

antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.

antigen retrieval performed with 0.01M Tris-EDTA Buffer (pH 9.0) prior to IHC staining.