

## Anti-SMAD7 Polyclonal Antibody

### Product Details

Ig Type:	IgG
Reactivity:	Human,Mouse,Rat (predicted:Pig,Cow)
Molecular Weight:	Theoretical: 46 kDa. Actual: 50 kDa.
Purification:	Protein A purified

### Applications

#### 1. Sample:

Lung (Mouse) Lysate at 30 µg

Placenta (Mouse) Lysate at 30 µg

Large intestine (Mouse) Lysate at 30 µg

Primary: Anti-MADH7/Smad7 (TMAB-01742) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 46 kDa

Observed band size: 50 kDa

2. Paraformaldehyde-fixed, paraffin embedded (rat lung); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (Smad7) Polyclonal Antibody, Unconjugated (TMAB-01742) at 1:600 overnight at 4°C, followed by a conjugated secondary for 20 min and DAB staining.

#### 3. Blank control: SH-SY5Y.

Primary Antibody (green line): Rabbit Anti-MADH7/Smad7 antibody (TMAB-01742)

Dilution: 1 µg/10<sup>6</sup> cells;

Isotype Control Antibody (orange line): Rabbit IgG.

Secondary Antibody: Goat anti-rabbit IgG-AF647

Dilution: 1 µg/test.

#### Verified Activity:

#### Protocol

The cells were fixed with 4% PFA (10 min at room temperature) and then permeabilized with 90% ice-cold methanol for 20 min at -20°C. The cells were then incubated in 5% BSA to block non-specific protein-protein interactions for 30 min at room temperature. Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature.

#### 4. Sample:

Lane 1: Cerebrum (Mouse) Lysate at 40 µg

Lane 2: Cerebrum (Rat) Lysate at 40 µg

Lane 3: Stomach (Mouse) Lysate at 40 µg

Lane 4: Lung (Mouse) Lysate at 40 µg

Lane 5: Kidney (Mouse) Lysate at 40 µg

Primary: Anti-MADH7/Smad7 (TMAB-01742) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 50 kDa

Observed band size: 50 kDa

5. Paraformaldehyde-fixed, paraffin embedded (rat stomach); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody

incubation with (MADH7) Polyclonal Antibody, Unconjugated (TMAB-01742) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.

6. U-2OS cell; 4% Paraformaldehyde-fixed; Triton X-100 at room temperature for 20 min; Blocking buffer (normal goat serum) at 37°C for 20 min; Antibody incubation with (MADH7/Smad7) polyclonal Antibody, Unconjugated (TMAB-01742) 1:100, 90 minutes at 37°C; followed by a conjugated Goat Anti-Rabbit IgG antibody at 37°C for 90 minutes, DAPI (blue) was used to stain the cell nucleus.

7. Sample:

Lane 1: Stomach (Mouse) Lysate at 40 µg

Lane 2: Spleen (Mouse) Lysate at 40 µg

Lane 3: Lung (Mouse) Lysate at 40 µg

Primary: Anti-MADH7/Smad7 (TMAB-01742) at 1/1000 dilution

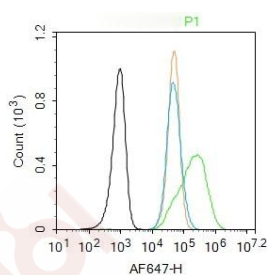
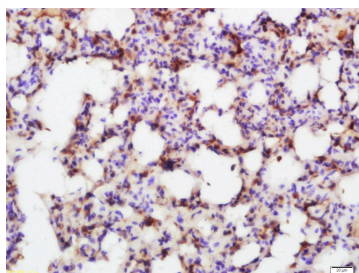
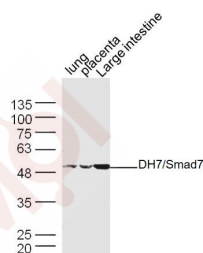
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

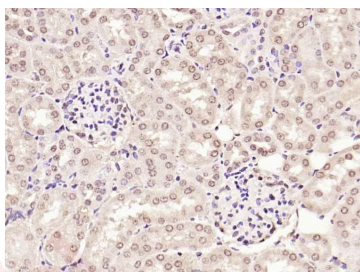
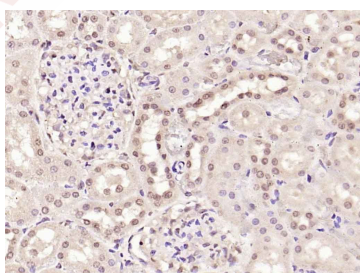
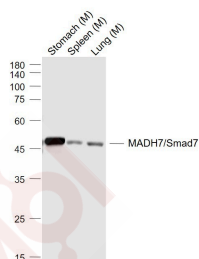
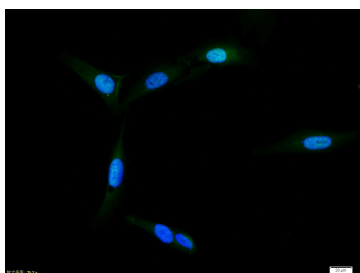
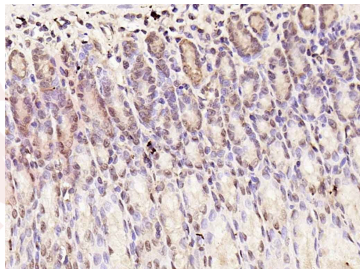
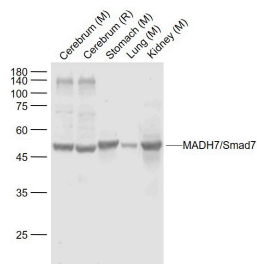
Predicted band size: 50 kDa

Observed band size: 50 kDa

8. Paraformaldehyde-fixed, paraffin embedded (rat kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (MADH7) Polyclonal Antibody, Unconjugated (TMAB-01742) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.

9. Paraformaldehyde-fixed, paraffin embedded (mouse kidney); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15 min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 min; Blocking buffer (normal goat serum) at 37°C for 30 min; Antibody incubation with (MADH7) Polyclonal Antibody, Unconjugated (TMAB-01742) at 1:200 overnight at 4°C, followed by operating according to SP Kit (Rabbit) instructions and DAB staining.





Application: FCM, ICC/IF, IF, IHC-Fr, IHC-P, WB

Recommended FCM=1 µg/Test; ICC/IF=1:100-500; IF=1:100-500; IHC-Fr=1:100-500; IHC-P=1:100-500; WB=1:500-2000

### Properties

Stability & Storage: Store at -20°C or -80°C for 12 months. Avoid repeated freeze-thaw cycles.

Shipping: Shipping with blue ice.

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### Antigen Details

Immunogen: KLH conjugated synthetic peptide: human Smad7

Antigen Species: Human

Gene ID: 4092

Uniprot ID: O15105

Synonyms: MADH 8; Mothers against DPP homolog 7; SMAD; MAD (mothers against decapentaplegic Drosophila) homolog 7; MAD; Mothers Against Decapentaplegic Drosophila Homolog of 7; Mothers against DPP homolog 8; Mothers against decapentaplegic homolog 7; SMAD 7; SMAD, mothers against DPP homolog 7; MADH 7; Mad homolog 7; MAD mothers against decapentaplegic homolog 7; Mothers against decapentaplegic homolog 8; SMAD, mothers against DPP homolog 7 (Drosophila); MADH8; SMAD family member 7; SMA-AND MAD-RELATED PROTEIN 7

Biology Area: SMADs, SMADs

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### Research Background

The protein encoded by this gene is a nuclear protein that binds the E3 ubiquitin ligase SMURF2. Upon binding, this complex translocates to the cytoplasm, where it interacts with TGF-beta receptor type-1 (TGFB1), leading to the degradation of both the encoded protein and TGFB1. Expression of this gene is induced by TGFB1. Variations in this gene are a cause of susceptibility to colorectal cancer type 3 (CRCS3). Several transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Jun 2010]

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