



# SMAD7 Polyclonal Antibody

|                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Catalog No</b>                  | YP-Ab-07190                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Isotype</b>                     | IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Reactivity</b>                  | Human;Mouse;Rat;Goat,,Sheep                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Applications</b>                | WB;ELISA                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Gene Name</b>                   | SMAD7 MADH7 MADH8                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Immunogen</b>                   | Synthesized peptide derived from part region of human protein                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Specificity</b>                 | SMAD7 Polyclonal Antibody detects endogenous levels of protein.                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Formulation</b>                 | Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Source</b>                      | Polyclonal, Rabbit,IgG                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Purification</b>                | The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.                                                                                                                                                                                                                                                                                                                                                      |
| <b>Dilution</b>                    | WB 1:500-2000 ELISA 1:5000-20000                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Concentration</b>               | 1 mg/ml                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Purity</b>                      | ≥90%                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Stability</b>           | -20°C/1 year                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Synonyms</b>                    | CRCS3;hSMAD7;MAD homolog 7;MAD homolog 8;MADH7;SMAD7;SMAD7 MADH7 MADH8;Mothers against decapentaplegic homolog 7 (MAD homolog 7) (Mothers against DPP homolog 7) (Mothers against decapentaplegic homolog 8) (MAD homolog 8) (Mothers against DPP homolog 8) (SMAD family membe                                                                                                                                                                                            |
| <b>Observed Band</b>               | 46kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Calculated Molecular Weight</b> | 46kD                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Cell Pathway</b>                | Nucleus . Cytoplasm . Interaction with NEDD4L or RNF111 induces translocation from the nucleus to the cytoplasm (PubMed:16601693). TGF-beta stimulates its translocation from the nucleus to the cytoplasm. PDPK1 inhibits its translocation from the nucleus to the cytoplasm in response to TGF-beta (PubMed:17327236). .                                                                                                                                                |
| <b>Tissue Specificity</b>          | Ubiquitous with higher expression in the lung and vascular endothelium.                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Function</b>                    | disease:Genetic variations in SMAD7 influence susceptibility to colorectal cancer type 3 (CRCS3) [MIM:612229]. Colorectal cancer consists of tumors or cancer of either the colon or rectum or both. Cancers of the large intestine are the second most common form of cancer found in males and females. Symptoms include rectal bleeding, occult blood in stools, bowel obstruction and weight loss. Treatment is based largely on the extent of cancer penetration into |



the intestinal wall. Surgical cures are possible if the malignancy is confined to the intestine. Risk can be reduced when following a diet which is low in fat and high in fiber.,function:Antagonist of signaling by TGF-beta (transforming growth factor) type 1 receptor superfamily members; has been shown to inhibit TGF-beta (Transforming growth factor) and activin signaling by associating with their receptors thus preventing SMAD2 access.

#### 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],

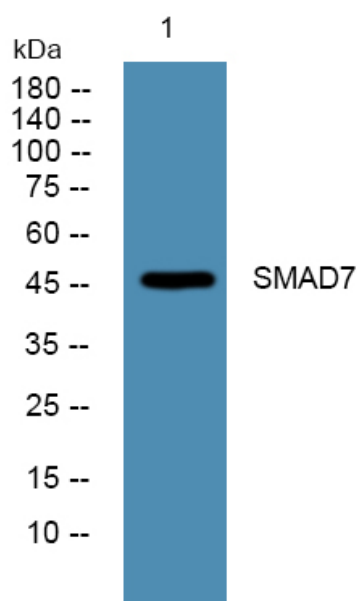
#### matters needing attention

Avoid repeated freezing and thawing!

#### Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

### Products Images



Western blot analysis of lysates from K562 cells, primary antibody was diluted at 1:1000, 4° over night