

### SMAD7 Antibody (monoclonal) (M05)

Mouse monoclonal antibody raised against a partial recombinant SMAD7. Catalog # AT3948a

#### Specification

## SMAD7 Antibody (monoclonal) (M05) - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype Calculated MW WB <u>O15105</u> <u>NM\_005904</u> Human Mouse Monoclonal IgG2a Kappa 46426

## SMAD7 Antibody (monoclonal) (M05) - Additional Information

Gene ID 4092

**Other Names** 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 member 7, SMAD 7, Smad7, hSMAD7, SMAD7, MADH7, MADH8

**Target/Specificity** SMAD7 (NP\_005895, 160 a.a. ~ 260 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.

**Dilution** WB~~1:500~1000

**Format** Clear, colorless solution in phosphate buffered saline, pH 7.2 .

Storage Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

**Precautions** SMAD7 Antibody (monoclonal) (M05) is for research use only and not for use in diagnostic or therapeutic procedures.

#### SMAD7 Antibody (monoclonal) (M05) - Protocols

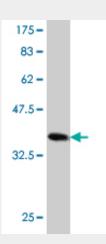
Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides

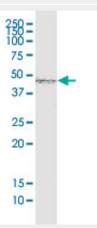


- <u>Dot Blot</u>
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

SMAD7 Antibody (monoclonal) (M05) - Images



Antibody Reactive Against Recombinant Protein.Western Blot detection against Immunogen (36.85 KDa).



SMAD7 monoclonal antibody (M05), clone 2G6. Western Blot analysis of SMAD7 expression in MCF-7.

#### SMAD7 Antibody (monoclonal) (M05) - 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 (TGFBR1), leading to the degradation of both the encoded protein and TGFBR1. Expression of this gene is induced by TGFBR1. 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.

# SMAD7 Antibody (monoclonal) (M05) - References

Genetic Heterogeneity in Colorectal Cancer Associations in Americans of African vs European Descent. Kupfer SS, et al. Gastroenterology, 2010 Jul 24. PMID 20659471. Association studies on 11



published colorectal cancer risk loci. von Holst S, et al. Br J Cancer, 2010 Aug 10. PMID 20648012. Susceptibility genetic variants associated with colorectal cancer risk correlate with cancer phenotype. Abul? A, et al. Gastroenterology, 2010 Sep. PMID 20638935. Hypoxic conversion of SMAD7 function from an inhibitor into a promoter of cell invasion. Heikkinen PT, et al. Cancer Res, 2010 Jul 15. PMID 20551054. Risk of genome-wide association study-identified genetic variants for colorectal cancer in a Chinese population. Xiong F, et al. Cancer Epidemiol Biomarkers Prev, 2010 Jul. PMID 20530476.