

SMAD7 Antibody (monoclonal) (M05)

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

Product Information

Application	WB
Primary Accession	<u>015105</u>
Other Accession	<u>NM_005904</u>
Reactivity	Human
Host	Mouse
Clonality	monoclonal
Isotype	IgG2a Kappa
Clone Names	2G6
Calculated MW	46426

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.

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.

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.





Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.