## Human Mothers against decapentaplegic homolog 5 (SMAD5) ELISA Kit

SAB Signalway Antibody

Catalog No: #EK7227

Package Size: #EK7227-1 48T #EK7227-2 96T

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Product Name	Human Mothers against decapentaplegic homolog 5 (SMAD5) ELISA Kit	
Brief Description	ELISA Kit	
Applications	ELISA	
Species Reactivity	Human (Homo sapiens)	
Other Names	DKFZp781C1895; DKFZp781O1323; Dwfc; JV5-1; MADH5; MAD homolog 5 MAD; mothers against	
	decapentaplegic homolog 5 SMA- and MAD-related protein 5 SMAD; mothers against DPP homolog	
	5 mothers against deca	
Accession No.	Q99717	
Uniprot	Q99717	
GeneID	4090;	
Storage	The stability of ELISA kit is determined by the loss rate of activity. The loss rate of this kit is less than 5%	
	within the expiration date under appropriate storage condition.	
	The loss rate was determined by accelerated thermal degradation test. Keep the kit at 37C for 4 and 7 days,	
	and compare O.D.values of the kit kept at 37C with that of at recommended temperature. (referring from China	
	Biological Products Standard, which was calculated by the Arrhenius equation. For ELISA kit, 4 days storage	
	at 37C can be considered as 6 months at 2 - 8C, which means 7 days at 37C equaling 12 months at 2 - 8C).	

## **Application Details**

Detect Range:0.312-20 ng/mL
Sensitivity:0.123 ng/mL
Sample Type:Serum, Plasma, Other biological fluids
Sample Volume: 1-200 μL
Assay Time:1-4.5h
Detection wavelength:450 nm

## **Product Description**

Detection Method:SandwichTest principle:This assay employs a two-site sandwich ELISA to quantitate SMAD5 in samples. An antibody specific for SMAD5 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySMAD5 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SMAD5 is added to the wells. After washing, Streptavidin conjugated Horseradish Peroxidase (HRP) is added to the wells. Following a wash to remove any unbound avidin-enzyme reagent, a substrate solution is added to the wells and color develops in proportion to the amount of SMAD5 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:SMAD5 or Mothers against decapentaplegic homolog 5 is a polypeptide that, as its name describes, is a homolog of the Drosophila gene: "Mothers against decapentaplegic". It belongs to the SMAD family of proteins, which belong to the TGFβ superfamily of modulators. Like many other TGFβ family members SMAD5 is involved in cell signalling and modulates signals of bone morphogenetic proteins (BMP's).

The binding of ligands causes the oligomerization and phosphorylation of the SMAD5 protein. SMAD5 is a receptor regulated SMAD (R-SMAD) and is

activated by bone morphogenetic protein type 1 receptor kinase. It may play a role in the pathway where T	GFβ is an inhibitor of hematopoietic
progenitor cells.	

Note: This product is for in vitro research use only