## Rat Mothers against decapentaplegic homolog 1 (SMAD1) ELISA Kit

Signalway Antibody

Catalog No: #EK7229

Package Size: #EK7229-1 48T #EK7229-2 96T

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

Product Name	Rat Mothers against decapentaplegic homolog 1 (SMAD1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat (Rattus norvegicus)
Other Names	BSP1; JV4-1; JV41; MADH1; MADR1; MAD; mothers against decapentaplegic homolog 1 Mad-related protein
	1 SMAD; mothers against DPP homolog 1 Sma- and Mad-related protein 1 TGF-beta signaling protein 1
Accession No.	P97588
Uniprot	P97588
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:0.132 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 SMAD1 in samples. An antibody specific for SMAD1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySMAD1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SMAD1 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 SMAD1 bound in the initial step. The color development is stopped and the intensity of the color is measured. Product Overview: belongs to the SMAD, a family of proteins similar to the gene products of the Drosophila gene 'mothers against decapentaplegic' (Mad) and the C. elegans gene Sma. The name is a combination of the two. It was found that a mutation in the 'Drosophila' gene, MAD, in the mother, repressed the gene, decapentaplegic, in the embryo. The phrase "Mothers against" was added as a humorous approach since mothers often form organizations opposing various issues eg. This protein mediates the signals of the bone morphogenetic proteins, which are involved in a range of biological activities including cell growth, apoptosis, morphogenesis, development and immune responses. In response to BMP ligands, this protein can be phosphorylated and activated by the BMP receptor kinase.

Note: This product is for in vitro research use only