Rat Mothers Against Decapentaplegic Homolog 1 (Smad1) ELISA Kit | Smad1 elisa kit

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CATALOG #	REACTIVITY
AAA139885	**Rat**

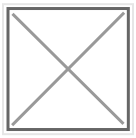
PRODUCT SYNONYMS

Mothers Against Decapentaplegic Homolog 1 (Smad1); Rat Mothers Against Decapentaplegic Homolog 1 (Smad1) ELISA Kit; Smad1 elisa kit

PRODUCT SPECIFICATIONS

Reactivity	Rat
Specificity	This assay has high sensitivity and excellent specificity for detection of Smad1. No significant cross-reactivity or interference between Smad1 and analogues was observed.
Sequence Length	465
Samples	Rat tissue homogenates, Cell lysates and other biological fluids
Detection Range	0.312-20ng/mL
Sensitivity	The minimum detectable dose of Smad1 is typically less than 0.117ng/mL. The sensitivity of this assay, or Lower Limit of Detection (LLD) was defined as the lowest protein concentration that could be differentiated from zero. It was determined by adding two standard deviations to the mean optical density value of twenty zero standard replicates and calculating the corresponding concentration.
Intray-assay Precision	Intra-assay Precision (Precision within an assay): 3 samples with low, middle and high level Smad1 were tested 20 times on one plate, respectively. Intra-Assay: CV<10%
Inter-assay Precision	Inter-assay Precision (Precision between assays): 3 samples with low, middle and high level Smad1 were tested on 3 different plates, 8 replicates in each plate. CV(%) = SD/meanX100. Inter-Assay: CV<12%
Intended Uses	The kit is a sandwich enzyme immunoassay for in vitro quantitative measurement of Smad1 in rat tissue homogenates, cell lysates and other biological fluids.
Preparation and Storage	For unopened kit, all the reagents should be kept according to the label on each vial. The Standard, Detection Reagent A, Detection Reagent B and the 96-well strip plate should be stored at -20 degree C while others should be at 4 degree C.

IMAGES



Standard Curve (Sample)

ADDITIONAL INFORMATION

Related Product Information for Smad1 elisa kit	**Principle of the assay:** The microtiter plate provided in this kit has been pre-coated with an antibody specific to Smad1. Standards or samples are then added to the appropriate microtiter plate wells with a biotin-conjugated antibody specific to Smad1. Next, Avidin conjugated to Horseradish Peroxidase (HRP) is added to each microplate well and incubated. After TMB substrate solution is added, only those wells that contain Smad1, biotin-conjugated antibody and enzyme-conjugated Avidin will exhibit a change in color. The enzyme-substrate reaction is terminated by the addition of sulphuric acid solution and the color change is measured spectrophotometrically at a wavelength of 450nm +/- 10nm. The concentration of Smad1 in the samples is then determined by comparing the O.D. of the samples to the standard curve.

NCBI AND UNIPROT INFORMATION

NCBI GI #	51173727
NCBI GeneID	4086
NCBI Accession #	NP_001003688.1
NCBI GenBank Nucleotide #	NM_001003688.1
UniProt Accession #	Q15797; Q16636; Q9UFT8; A8KAJ0; D3DNZ9
Molecular Weight	15,406 Da
NCBI Official Full Name	mothers against decapentaplegic homolog 1
NCBI Official Synonym Full Names	SMAD family member 1
NCBI Official Symbol	SMAD1
NCBI Official Synonym Symbols	BSP1; JV41; BSP-1; JV4-1; MADH1; MADR1
NCBI Protein Information	mothers against decapentaplegic homolog 1; MAD homolog 1; MAD, mothers against decapentaplegic homolog 1; Mad-related protein 1; SMAD, mothers against DPP homolog 1; TGF-beta signaling protein 1; transforming growth factor-beta signaling protein 1; transforming growth factor-beta-signaling protein 1
UniProt Protein Name	Mothers against decapentaplegic homolog 1
UniProt Gene Name	**SMAD1**
UniProt Synonym Gene Names	BSP1; MADH1; MADR1; MAD homolog 1; Mothers against DPP homolog 1; SMAD 1; Smad1; hSMAD1; BSP-1
UniProt Entry Name	SMAD1_HUMAN

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Small volumes of product may become entrapped in the seal of the vial during shipment and storage; if necessary, briefly centrifuge the vial on a tabletop centrifuge to dislodge any liquid in the cap.

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Online datasheet: https://stage.aaabiotech.com/rat-elisa-kits/mothers-against-decapentaplegic-homolog-1-smad1/139885