# Human Mothers against decapentaplegic homolog 9 (SMAD9) ELISA Kit

Catalog No: #EK7225

Package Size: #EK7225-1 48T #EK7225-2 96T

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## Description

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| Product Name | Human Mothers against decapentaplegic homolog 9 (SMAD9) ELISA Kit |
| Brief Description | ELISA Kit |
| Applications | ELISA |
| Species Reactivity | Human (Homo sapiens) |
| Other Names | MADH6; MADH9; SMAD8; SMAD8A; SMAD8B; MAD (mothers against decapentaplegic; Drosophila) homolog 9\|MAD; mothers against decapentaplegic homolog 9\|Mothers against decapentaplegic; drosophila; homolog o |
| Accession No. | O15198 |
| Uniprot | O15198 |
| GeneID | 4093; |
| 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.<br>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:0.156-10 ng/mL

Sensitivity:0.061 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 SMAD9 in samples. An antibody specific for SMAD9 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySMAD9 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SMAD9 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 SMAD9 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:SMAD9 or Mothers against decapentaplegic homolog 9 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, SMAD9 is involved in cell signalling.
When a bone morphogenetic protein binds to a receptor (BMP type 1 receptor kinase) it causes SMAD9 to interact with SMAD anchor for receptor activation (SARA).The binding of ligands causes the phosphorylation of the SMAD9 protein and the dissociation from SARA and the association with SMAD4. It is subsequently transferred to the nucleus where it forms complexes with other proteins and acts as a transcription factor

Note: This product is for in vitro research use only