Mouse POU domain, class 5, transcription factor 1 (POU5F1) ELISA Kit

Catalog No: #EK8383

Package Size: #EK8383-1 48T #EK8383-2 96T

Orders: order@signalwayantibody.com
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Description

Product Name	Mouse POU domain, class 5, transcription factor 1 (POU5F1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	DADB-104B20.2; MGC22487; OCT3; OCT4; OTF3; OTF4; POU domain; class 5; transcription factor 1|POU-type homeodomain-containing DNA-binding protein|octamer-binding transcription factor-3
Accession No.	P20263
Uniprot	P20263
GeneID	18999;
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:0.156-10 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 POU5F1 in samples. An antibody specific for POU5F1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPOU5F1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for POU5F1 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 POU5F1 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:Oct-4 is a homeodomain transcription factor of the POU family. This protein is critically involved in the self-renewal of undifferentiated embryonic stem cells. As such, it is frequently used as a marker for undifferentiated cells. Oct-4 expression must be closely regulated; too much or too little will actually cause differentiation of the cells.

Oct-4 transcription factor is initially active as a maternal factor in the oocyte but remains active in embryos throughout the preimplantation period. Oct-4 expression is associated with an undifferentiated phenotype and tumors. In fact gene knockdown of Oct-4 promotes differentiation, thereby demonstrating a role for these factors in human embryonic stem cell self-renewal.

Note: This product is for in vitro research use only