

Human Sulfatase-modifying factor 1 (SUMF1) ELISA Kit



Catalog No: #EK6719

Orders: order@signalwayantibody.com

Package Size: #EK6719-1 48T #EK6719-2 96T

Support: tech@signalwayantibody.com

Description

Product Name	Human Sulfatase-modifying factor 1 (SUMF1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	UNQ3037; AAPA3037; FGE; MGC131853; MGC150436; C-alpha-formylglycine-generating enzyme FGly-generating enzyme
Accession No.	Q8NBK3
Uniprot	Q8NBK3
GeneID	285362;
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:0.064 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 SUMF1 in samples. An antibody specific for SUMF1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anySUMF1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for SUMF1 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 SUMF1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**Sulfatases catalyze the hydrolysis of sulfate esters such as glycosaminoglycans, sulfolipids, and steroid sulfates. C-alpha-formylglycine (FGly), the catalytic residue in the active site of eukaryotic sulfatases, is posttranslationally generated from a cysteine by SUMF1, the FGly-generating enzyme (FGE), in the endoplasmic reticulum (ER).

The genetic defect of FGly formation caused by mutations in the SUMF1 gene results in multiple sulfatase deficiency (MSD), a lysosomal storage disorder (Roeser et al., 2006).Highly expressed in kidney, pancreas and liver. Detected at lower levels in leukocytes, lung, placenta, small intestine, skeletal muscle and heart.

Note: This product is for in vitro research use only