Human Histone-lysine N-methyltransferase, H3 lysine-79 specific (DOT1L) ELISA Kit

Catalog No: #EK10542

Package Size: #EK10542-1 48T #EK10542-2 96T

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

Description

Product Name	Human Histone-lysine N-methyltransferase, H3 lysine-79 specific (DOT1L) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	DKFZp586P1823; DOT1; KIAA1814; KMT4; DOT1-like; histone H3 methyltransferase|histone methyltransferase DOT1L
Accession No.	Q8TEK3
Uniprot	Q8TEK3
GeneID	84444;
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:0.059 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 DOT1L in samples. An antibody specific for DOT1L has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyDOT1L present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for DOT1L 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 DOT1L bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:DOT1L is inactive against free core histones, but shows significant histone methyltransferase activity against nucleosomes. DOT1L is a nucleosomal histone-3 (H3)-specific methyltransferase that requires the SAM and sequences between amino acids 351 and 472 for activity. Overexpression of DOT1L in human embryonic kidney cells significantly increased methylation of lys79 of H3, but had no effect on lys4 or lys9. Methylation of lys79, attributed to DOT1L, was regulated during the cell cycle in synchronized HeLa cells. The deduced 1,537-amino acid protein has a calculated molecular mass of 165 kD and contains a SAM (sterile alpha motif) domain for protein-protein interaction. DOT1L does not, however, have the SET domain found in most histone lysine methyltransferases.

Note: This product is for in vitro research use only