Mouse DNA polymerase beta (POLB) ELISA Kit

Catalog No: #EK8396

Package Size: #EK8396-1 48T #EK8396-2 96T

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

Description

Product Name	Mouse DNA polymerase beta (POLB) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Mouse (Mus musculus)
Other Names	MGC125976; DNA pol beta|DNA polymerase beta subunit|DNA-directed DNA polymerase beta
Accession No.	Q8K409
Uniprot	Q8K409
GeneID	18970;
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:0.051 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 POLB in samples. An antibody specific for POLB has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPOLB present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for POLB 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 POLB bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:DNA polymerase beta maintains genome integrity by participating in base excision repair. Over expression of POLB mRNA has been correlated with a number of cancer types whereas deficiencies in POLB results in hypersensitivity to alkylating agents, induced apoptosis and chromosomal breaking therefore it is essential that POLB expression is tightly regulated.
POLB gene is upregulated by CREB1 transcription factor binding to the cAMP response element(CRE) present in the promoter of the POLB gene in response to exposure to alkylating agents. POLB gene expression is also regulated at the post transcriptional level as the 3UTR of the POLB mRNA has been shown to contain three stem-loop structures that influence gene expression.

Note: This product is for in vitro research use only