## Human DNA2-like helicase (DNA2) ELISA Kit

Catalog No: #EK10558

Package Size: #EK10558-1 48T #EK10558-2 96T



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## Description

Product Name	Human DNA2-like helicase (DNA2) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Human (Homo sapiens)
Other Names	DNA2L; FLJ10063; KIAA0083; MGC133297; DNA replication helicase 2 homolog DNA2 (DNA replication
	helicase; yeast; homolog)-like DNA2 DNA replication helicase 2-like
Accession No.	Q5ZKG3
Uniprot	Q5ZKG3
GeneID	423688;
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:Request Information Sensitivity:Request Information 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 DNA2 in samples. An antibody specific for DNA2 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyDNA2 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for DNA2 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 DNA2 bound in the initial step. The color development is stopped and the intensity of the color is measured.Product Overview:DNA2 interacted with mitochondrial DNA polymerase-gamma and significantly stimulated its polymerase activity. DNA2 and flap endonuclease-1 (FEN1) synergistically processed intermediate 5-prime flap structures occurring in DNA replication and long-patch base excision repair (LP-BER) in mitochondria.

The deduced 1,076-amino acid protein has a putative ATP/GTP-binding site motif A and a predicted transmembrane domain. Northern blot analysis detected low expression in KG-1 and HeLa cells and in thymus, but not in any other human tissue examined. Yeast Dna2 helicase is a DNA-dependent ATPase that unwinds duplex DNA to generate single-stranded DNA, which then acts as a template for DNA polymerization during DNA replication.

Note: This product is for in vitro research use only