

# Rat DNA polymerase delta catalytic subunit (POLD1) ELISA Kit

Catalog No: #EK8395

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Package Size: #EK8395-1 48T #EK8395-2 96T

## Description

Product Name	Rat DNA polymerase delta catalytic subunit (POLD1) ELISA Kit
Brief Description	ELISA Kit
Applications	ELISA
Species Reactivity	Rat ( <i>Rattus norvegicus</i> )
Other Names	CDC2; POLD; CDC2 homolog DNA-directed DNA polymerase delta 1 DNA-directed polymerase delta 1
Accession No.	O54747
Uniprot	O54747
GeneID	59294;
Storage	<p>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.</p> <p>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).</p>

## Application Details

Detect Range:0.156-10 ng/mL

Sensitivity:0.054 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 POLD1 in samples. An antibody specific for POLD1 has been pre-coated onto a microplate. Standards and samples are pipetted into the wells and anyPOLD1 present is bound by the immobilized antibody. After removing any unbound substances, a biotin-conjugated antibody specific for POLD1 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 POLD1 bound in the initial step. The color development is stopped and the intensity of the color is measured.**Product Overview:**The DNA polymerase delta complex is involved in DNA replication and repair, and it consists of the proliferating cell nuclear antigen (PCNA), the multisubunit replication factor C, and the 4 subunit polymerase complex: POLD1, POLD2, POLD3, and POLD4.

The enzyme is 94% identical to bovine DNA polymerase delta and contains the numerous highly conserved regions previously observed in the bovine and yeast enzymes. The human enzyme also contains 2 putative zinc finger domains in the C-terminal region of the molecule as well as a putative nuclear localization signal at the N-terminal end.WRN functionally interacts with DNA polymerase delta, which is required for DNA replication and DNA repair.

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Note: This product is for in vitro research use only