

Datasheet for ABIN359185

anti-Deoxyguanosine Kinase antibody (N-Term)



[Go to Product page](#)

1 Image

Overview

Quantity:	0.4 mL
Target:	Deoxyguanosine Kinase (DGUOK)
Binding Specificity:	N-Term
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This Deoxyguanosine Kinase antibody is un-conjugated
Application:	Western Blotting (WB), Enzyme Immunoassay (EIA)

Product Details

Immunogen:	This antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide selected from the N-terminal region of human DGUOK.
Isotype:	Ig Fraction
Specificity:	This antibody reacts to Deoxyguanosine Kinase (DGUOK).
Purification:	Protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS

Target Details

Target:	Deoxyguanosine Kinase (DGUOK)
Alternative Name:	Deoxyguanosine Kinase (DGUOK Products)

Target Details

Background:	Mitochondrial deoxyguanosine kinase (DGUOK) is required for the phosphorylation of several deoxyribonucleosides and certain purine deoxyribonucleoside analogs widely employed as antiviral and chemotherapeutic agents. Purine deoxyribonucleoside analogs are extensively used in treatment of lymphoproliferative disorders. These compounds are administered as pro-drugs, and their efficiency is dependent on intracellular phosphorylation to the corresponding triphosphates. In mammalian cells, the phosphorylation of purine deoxyribonucleosides is mediated predominantly by 2 deoxyribonucleoside kinases: cytosolic deoxycytidine kinase (DCK) and mitochondrial deoxyguanosine kinase (DGUOK also known as DGK). DGUOK expression is ubiquitous, with highest levels in muscle, brain, liver and lymphoid tissues. Defects in DGUOK are a cause of mitochondrial DNA depletion syndrome (MDS). MDS is a clinically heterogeneous group of disorders characterized by a reduction in mitochondrial DNA (mtDNA) copy number. Primary mtDNA depletion is inherited as an autosomal recessive trait and may affect single organs, typically muscle or liver, or multiple tissues. Mitochondrial DNA depletion syndromes are phenotypically heterogeneous, autosomal recessive disorders characterized by tissue-specific reduction in mtDNA copy number. Affected individuals with the hepatocerebral form of mtDNA depletion syndrome have early progressive liver failure and neurologic abnormalities, hypoglycemia, and increased lactate in body fluids.Synonyms: DGK, DGUOK
Gene ID:	1716, 9606
UniProt:	Q16854
Pathways:	Ribonucleoside Biosynthetic Process

Application Details

Application Notes:	ELISA 1/1,000. Western blotting: 1/100 - 1/500.
Restrictions:	For Research Use only

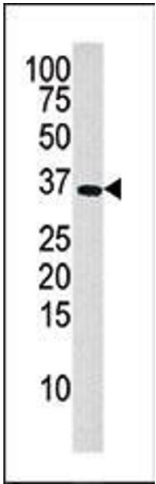
Handling

Format:	Liquid
Concentration:	0.25 mg/mL
Buffer:	PBS with 0.09 % (W/V) sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which

Handling

	should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C
Storage Comment:	Store the antibody undiluted at 2-8 °C for one month or (in aliquots) at-20 °C for longer.

Images



Western Blotting

Image 1. Western blot analysis of anti-DGUOK Pab in mouse kidney tissue lysate (35ug/lane). DGUOK(arrow) was detected using the purified Pab (1:60 dilution).