Datasheet for ABIN391122

# anti-Deoxyguanosine Kinase antibody (N-Term)

2 Images

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## Overview

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| Quantity: | 400 µL |
| Target: | Deoxyguanosine Kinase (DGUOK) |
| Binding Specificity: | AA 1-30, N-Term |
| Reactivity: | Human, Mouse |
| Host: | Rabbit |
| Clonality: | Polyclonal |
| Conjugate: | This Deoxyguanosine Kinase antibody is un-conjugated |
| Application: | Western Blotting (WB) |

## Product Details

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| Immunogen: | This Deoxyguanosine Kinase (DGUOK) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from the N-terminal region of human Deoxyguanosine Kinase (DGUOK). |
| Clone: | RB5277 |
| Isotype: | Ig Fraction |
| Purification: | This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS. |

## Target Details

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| Target: | Deoxyguanosine Kinase (DGUOK) |
| Abstract: | DGUOK Products |

## Target Details

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| Background: | Mitochondrial deoxyguanosine kinase (DGUOK) is required for the phosphorylation of several deoxyribonucleosides and certain purine deoxykribonucleoside 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. |
| Molecular Weight: | 32056 |
| Gene ID: | 1716 |
| NCBI Accession: | NP_550438, NP_550440 |
| UniProt: | Q16854 |
| Pathways: | Ribonucleoside Biosynthetic Process |

## Application Details

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| Application Notes: | WB: 1:1000. WB: 1:1000 |
| Restrictions: | For Research Use only |

## Handling

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| Format: | Liquid |
| Buffer: | Purified polyclonal antibody supplied in 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

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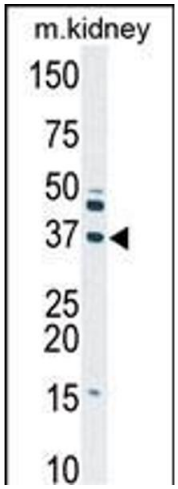
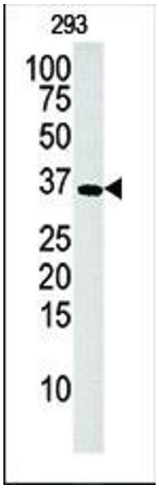
| | should be handled by trained staff only. |
| Storage: | 4 °C,-20 °C |
| Storage Comment: | Maintain refrigerated at 2-8 °C for up to 6 months. For long term storage store at -20 °C in small aliquots to prevent freeze-thaw cycles. |
| Expiry Date: | 6 months |

## Images




**Western Blotting**

**Image 1.** Western blot analysis of anti-DGUOK Pab (ABIN391122 and ABIN2841249) in mouse kidney tissue lysate (35 µg/lane). DGUOK(arrow) was detected using the purified Pab.




**Western Blotting**

**Image 2.** Western blot analysis of anti-hDGUOK-M1 Pab (ABIN391122 and ABIN2841249) in 293 cell line lysate (35 µg/lane). hDGUOK-M1(arrow) was detected using the purified Pab.