

For Research Use Only

dGK Polyclonal antibody

Catalog Number: 16314-1-AP



Basic Information

Catalog Number: 16314-1-AP	GenBank Accession Number: BC015757	Purification Method: Antigen affinity purification
Size: 150ul , Concentration: 180 ug/ml by Bradford method using BSA as the standard;	GeneID (NCBI): 1716	Recommended Dilutions: WB 1:500-1:1000 IHC 1:50-1:500
Source: Rabbit	UNIPROT ID: Q16854	
Isotype: IgG	Full Name: deoxyguanosine kinase	
Immunogen Catalog Number: AG9361	Calculated MW: 277 aa, 32 kDa	
	Observed MW: 28-32 kDa, 56-64 kDa	

Applications

Tested Applications: WB, IHC, ELISA	Positive Controls:
Species Specificity: human, mouse	WB : mouse kidney tissue, IHC : human hepatocirrhosis tissue,

Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0

Background Information

Deoxyguanosine kinase (dGK) deficiency is a frequent cause of mitochondrial DNA depletion associated with a hepatocerebral phenotype. dGK is a member of the deoxyribonucleoside kinase family involved in phosphorylation of deoxyribonucleosides. In mammals, there are four deoxyribonucleoside kinases with overlapping specificities: two cytoplasmic enzymes, thymidine kinase 1 (TK1) and deoxycytidine kinase (dCK), and two mitochondrial enzymes, thymidine kinase 2 (TK2) and deoxyguanosine kinase (dGK). The human dGK protein is highly specific for purine substrates. Human dGK is a dimer of two identical subunits of 30 kDa. The three-dimensional structure of the human dGK monomer has been reported, providing an explanation for the substrate specificity of the enzyme. (PMID: 29786478, PMID: 11427893, PMID: 17073823)

Storage

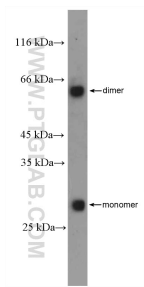
Storage:
Store at -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

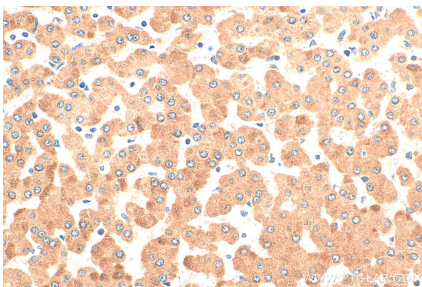
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

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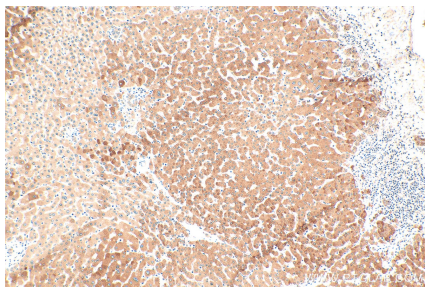
Selected Validation Data



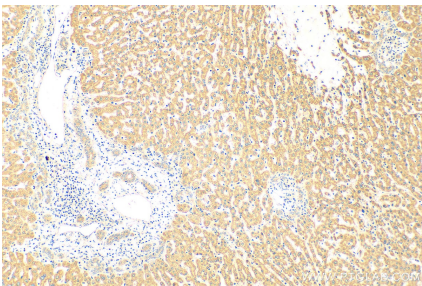
mouse kidney tissue were subjected to SDS PAGE followed by western blot with 16314-1-AP (dGK antibody) at dilution of 1:300 incubated at room temperature for 1.5 hours.



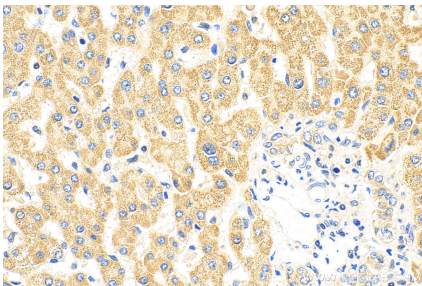
Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 16314-1-AP (dGK antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 16314-1-AP (dGK antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 16314-1-AP (dGK antibody) at dilution of 1:200 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



Immunohistochemical analysis of paraffin-embedded human hepatocirrhosis tissue slide using 16314-1-AP (dGK antibody) at dilution of 1:200 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).