

## **DHA Kinase Polyclonal Antibody**

Catalog No: YT1341

**Reactivity:** Human; Mouse; Rat

**Applications:** WB;IHC;IF;ELISA

Target: DHA Kinase

**Fields:** >>Fructose and mannose metabolism;>>Glycerolipid metabolism;>>Metabolic

pathways;>>Carbon metabolism;>>RIG-I-like receptor signaling pathway

Gene Name: DAK

**Protein Name:** Bifunctional ATP-dependent dihydroxyacetone kinase/FAD-AMP lyase

Human Gene Id: 26007

**Human Swiss Prot** 

No:

Mouse Gene ld: 225913

**Mouse Swiss Prot** 

No:

**Rat Gene Id:** 361730

Rat Swiss Prot No: Q4KLZ6

**Immunogen :** The antiserum was produced against synthesized peptide derived from human

DAK. AA range:91-140

Specificity: DHA Kinase Polyclonal Antibody detects endogenous levels of DHA Kinase

protein.

Q3LXA3

Q8VC30

**Formulation :** Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.

Source: Polyclonal, Rabbit, IgG

**Dilution :** WB 1:200 - 1:1000. ELISA: 1:20000.. IF 1:20-50

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**Purification:** The antibody was affinity-purified from rabbit antiserum by affinity-

chromatography using epitope-specific immunogen.

Concentration: 1 mg/ml

Storage Stability: -15°C to -25°C/1 year(Do not lower than -25°C)

Observed Band: 59kD

**Cell Pathway:** Glycerolipid metabolism;RIG-I-like receptor;

**Background:** This gene is a member of the family of dihydroxyacetone kinases, which have a

protein structure distinct from other kinases. The product of this gene

phosphorylates dihydroxyacetone, and also catalyzes the formation of riboflavin 4',5'-phosphate (aka cyclin FMN) from FAD. Several alternatively spliced transcript variants have been identified, but the full-length nature of only

one has been determined. [provided by RefSeg, Jul 2008].

**Function :** catalytic activity:ATP + glycerone = ADP + glycerone phosphate.,catalytic

activity:FAD = AMP + riboflavin

cyclic-4',5'-phosphate.,cofactor:Magnesium.,cofactor:Manganese or cobalt; for FAD-AMP lyase activity.,enzyme regulation:Each activity is inhibited by the substrate(s) of the other.,function:Catalyzes both the phosphorylation of

dihydroxyacetone and the splitting of ribonucleoside diphosphate-X compounds

among which FAD is the best substrate.,similarity:Belongs to the dihydroxyacetone kinase (DAK) family.,similarity:Contains 1 DAK1 (dihydroxyacetone kinase subunit 1) domain.,similarity:Contains 1 DAK2

(dihydroxyacetone kinase subunit 2) domain., subunit: Homodimer.,

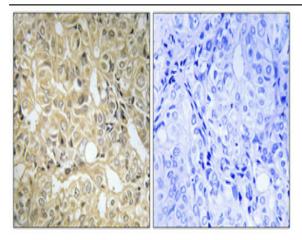
Subcellular Location:

nucleus, cytosol, extracellular exosome,

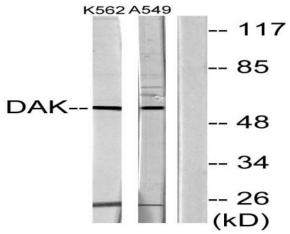
**Expression :** Detected in erythrocytes (at protein level).

## **Products Images**

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Immunohistochemical analysis of paraffin-embedded Human prostate cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Western blot analysis of lysates from K562 and A549 cells, using DAK Antibody. The lane on the right is blocked with the synthesized peptide.