

#### PanK4 (Thr63) Antibody

Rabbit Polyclonal Antibody Catalog # AN1287

#### **Specification**

## PanK4 (Thr63) Antibody - Product Information

Application WB
Primary Accession O80YV4
Reactivity Mouse
Host Rabbit
Clonality Polyclonal
Calculated MW 91522

## PanK4 (Thr63) Antibody - Additional Information

Gene ID 269614
Gene Name PANK4

**Target/Specificity** 

Synthetic phospho-peptide corresponding to amino acid residues surrounding Thr63 conjugated to KLH

**Dilution** 

WB~~ 1:1000

## **Format**

Antigen Affinity Purified from Pooled Serum

#### **Storage**

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.

#### **Precautions**

PanK4 (Thr63) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **Shipping**

Blue Ice

#### PanK4 (Thr63) Antibody - Protocols

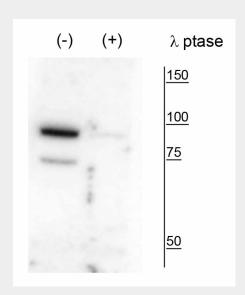
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation



- Flow Cytomety
- Cell Culture

# PanK4 (Thr63) Antibody - Images



Western blot of mouse whole brain lysate showing specific labeling of the  $\sim 86$  kDa PanK4 phosphorylated at Ser63 in the first lane (-). Phosphospecificity is shown in the second lane (+) where immunolabeling is nearly eliminated with lambda phosphatase ( $\lambda$ -Ptase, 1200 units for 30 minutes).

# PanK4 (Thr63) Antibody - Background

Pantothenate kinase, PanK, is a vital regulatory enzyme for coenzyme A (CoA) biosynthesis, phosphorylating pantothenate (vitamin B5) to 4'-phosphopantothenate, then quickly transforming to CoA which is an essential component for fatty acid metabolism (Abiko, Y, 1967). There are 4 members of the PanK family, located on chromosomes 10q23.31, 20p13, 5q35, and 1p36.32 (Zhou et al, 2001). PanK1 is predominantly in heart, liver, and kidney. PanK2 is expressed ubiquitously, with higher levels in retinal and infant basal ganglia. PanK3 has high levels in liver, while PanK4 is expressed ubiquitously with its highest levels found in muscle (Zhou et al, 2001). Additionally, PanK4 has been shown to regulate Pkm2 activity affecting glucose metabolism (Li et al, 2005). There have been several phospho-serine, threonine, and tyrosine sites identified within PanK4, the role of each one has yet to be determined.