10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PanK4 (Thr63) Antibody
Rabbit Polyclonal Antibody
Catalog # AN1287

Specification

PanK4 (Thr63) Antibody - Product Information

Application	**WB**
Primary Accession	Q80YV4
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

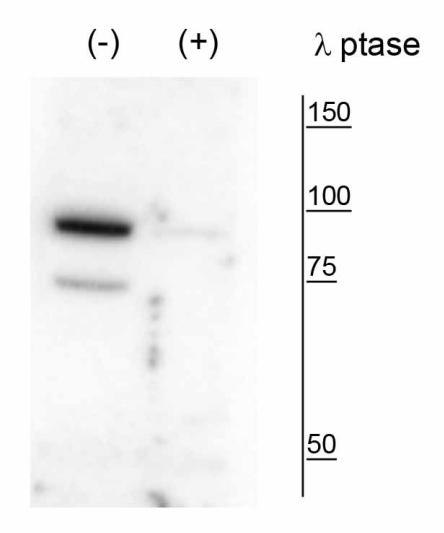
Provided below are standard protocols that you may find useful for product applications.

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

10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

- Flow Cytomety
- Cell Culture

PanK4 (Thr63) Antibody - Images



Western blot of mouse whole brain lysate showing specific labeling of the ~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 (λ-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.