

PANK1 Rabbit pAb

Catalog # AP98797

Product Information

Application	WB, IHC-P, IHC-F, IF
Primary Accession	Q8TE04
Other Accession	Q8TE04
Host	Rabbit
Clonality	Polyclonal
Calculated MW	64339
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PANK1
Epitope Specificity	501-598/598
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SIMILARITY	Belongs to the type II pantothenate kinase family.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	The pantothenate kinase (PANK) family of proteins catalyzes the first step in coenzyme A (CoA). Pantothenate kinase 1 (PANK1) is a 598 amino acid member of the pantothenate kinase family that plays a role in the physiological regulation of the intracellular CoA concentration. Localized to the cytoplasm, PANK1 is strongly inhibited by acetyl-CoA and manyl-CoA, as well as by high concentration of non-esterified CoA (CoASH). Four known isoforms of PANK1 exist as a result of alternative splicing events. Of these isoforms, PANK1a and PANK1b have been identified as the catalytically active isoforms. Isoform PANK1a is most highly expressed in brain, heart, kidney, liver, skeletal muscle and kidney. Isoform PANK1b is detected at much lower levels in kidney, liver, brain and testis and is not detected in heart or skeletal muscle.

Additional Information

Gene ID	53354
Other Names	PANK; Pank1b; PANK1_HUMAN; PANK1; hPank; hPank1; Pantothenic acid kinase 1; 2.7.1.33; PANK1_MOUSE; mPank; mPank1; pantothenate kinase 1; pantothenate kinase
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,IF=1:100-500
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

Protein Information

Name	PANK1
Synonyms	PANK
Function	[Isoform 1]: Catalyzes the phosphorylation of pantothenate to generate 4'-phosphopantothenate in the first and rate-determining step of coenzyme A (CoA) synthesis.
Cellular Location	Cytoplasm. [Isoform 2]: Cytoplasm, cytosol. Cytoplasmic vesicle, clathrin-coated vesicle. Recycling endosome
Tissue Location	[Isoform 1]: Expressed at high levels in brain, heart, kidney, liver, skeletal muscle and testis

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.