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PANK3 Rabbit pAb

Catalog # AP98798

Product Information

Application	IHC-P, IHC-F, IF
Primary Accession	Q9H999
Other Accession	Q9H999
Reactivity	Rat
Predicted	Pig, Human, Mouse, Chicken, Dog, Horse, Sheep
Host	Rabbit
Clonality	Polyclonal
Calculated MW	41094
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human PANK3
Epitope Specificity	271-370/370
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.
SUBUNIT	Homodimer.
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) biosynthesis. Coenzyme A is an important coenzyme involved in the synthesis and oxidation of fatty acids, as well as the oxidation of pyruvate in the citric acid (Krebs) cycle. Pantothenate kinase 3 (PANK3) is a 370 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, PANK3 is regulated by feedback inhibition by CoA and its thioesters. PANK3 transfers a phosphate from ATP to pantothenate (Vitamin B5), resulting in formation of 4'-phosphopantothenate. Closely related to its family members, PANK1, PANK2 and PANK4, PANK3 is highly expressed in liver. Pantothenate kinase associated neurodegeneration (PKAN) results from mutations in the gene encoding PANK2, the only mitochondria targeted human PANK.

Additional Information

Gene ID	79646
Other Names	PANK3_HUMAN; PANK3; hPanK3; Pantothenic acid kinase 3; 2.7.1.33; pantothenate kinase 3
Dilution	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	PANK3
Function	Catalyzes the phosphorylation of pantothenate to generate 4'-phosphopantothenate in the first and rate-determining step of coenzyme A (CoA) synthesis.
Cellular Location	Cytoplasm {ECO:0000269|PubMed:23152917, ECO:0000305}
Tissue Location	Highly expressed in the liver.

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