PANK2 Polyclonal Antibody

Catalog No	BYab-07681
Isotype	IgG
Reactivity	Human;Rat;Mouse;
Applications	WB;ELISA
Gene Name	PANK2 C20orf48
Protein Name	Pantothenate kinase 2, mitochondrial (hPanK2) (EC 2.7.1.33) (Pantothenic acid kinase 2)
Immunogen	Synthesized peptide derived from part region of human protein
Specificity	PANK2 Polyclonal Antibody detects endogenous levels of protein.
Formulation	Liquid in PBS containing 50% glycerol, and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-2000 ELISA 1:5000-20000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	
Observed Band	62kD
Cell Pathway	[Isoform 1]: Mitochondrion . Mitochondrion intermembrane space . Nucleus . Localizes predominantly to the mitochondria and to a lesser extent to the nucleus. Found in both the mitochondria and the nucleus throughout the cell cycle, with the exception of the G2/M phase when it is restricted to mitochdondria. .; [Isoform 2]: Cytoplasm .; [Isoform 3]: Cytoplasm .; [Isoform 4]: Cytoplasm .
Tissue Specificity	Expressed in the brain (at protein level) (PubMed:15659606, PubMed:17825826). Ubiquitous (PubMed:11479594). Highly expressed in the testis (PubMed:17825826). Expressed in the umbilical vein endothelial cells (HUVEC) (PubMed:30221726).
Function	catalytic activity:ATP + (R)-pantothenate = ADP + (R)-4'-phosphopantothenate.,caution:In addition to the presence of a second start site in position 124, it is not excluded that the Leu-111 may exceptionally also serve as an alternative initiation codon.,disease:Defects in PANK2 are the cause of hypoprebetalipoproteinemia, acanthocytosis, retinitis pigmentosa, and pallidal degeneration (HARP) [MIM:607236]. HARP is a rare syndrome with many clinical

	similarities to PKAN.,disease:Defects in PANK2 are the cause of pantothenate kinase-associated neurodegeneration (PKAN) [MIM:234200]; formerly known as Hallervorden-Spatz syndrome (HSS). PKAN is an autosomal recessive neurodegenerative disorder associated with iron accumulation in the brain. Clinical features include extrapyramidal dysfunction, and a relentlessly progressive course. Atypical PKAN is diagnosed in individuals who may not fit wit
Background	This gene encodes a protein belonging to the pantothenate kinase family and is the only member of that family to be expressed in mitochondria. Pantothenate kinase is a key regulatory enzyme in the biosynthesis of coenzyme A (CoA) in bacteria and mammalian cells. It catalyzes the first committed step in the universal biosynthetic pathway leading to CoA and is itself subject to regulation through feedback inhibition by acyl CoA species. Mutations in this gene are associated with HARP syndrome and pantothenate kinase-associated neurodegeneration (PKAN), formerly Hallervorden-Spatz syndrome. Alternative splicing, involving the use of alternate first exons, results in multiple transcripts encoding different isoforms. [provided by RefSeq, Jul 2008],
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

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