

Product datasheet

Anti-PANK2 antibody ab71381

1 References 1 Image

Overview

Product name	Anti-PANK2 antibody
Description	Rabbit polyclonal to PANK2
Host species	Rabbit
Tested applications	Suitable for: WB, ELISA
Species reactivity	Reacts with: Human
Immunogen	Synthetic peptide from the central region of human PANK2 conjugated to KLH.
Positive control	Mouse liver tissue lysate.

Properties

Form	Liquid
Storage instructions	Shipped at 4°C. Upon delivery aliquot and store at -20°C. Avoid freeze / thaw cycles.
Storage buffer	Preservative: 0.09% Sodium Azide Constituents: PBS
Purity	Protein G purified
Purification notes	This antibody is purified through a protein G column, eluted with high and low pH buffers and neutralized immediately, followed by dialysis against PBS.
Clonality	Polyclonal
Isotype	IgG

Applications

Our [Abpromise guarantee](#) covers the use of **ab71381** in the following tested applications.

The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

Application	Abreviews	Notes
WB		
ELISA		

Application notes

ELISA: 1/1000.

WB: 1/100 - 1/500. Detects bands of approximately 30 and 63 kDa (predicted molecular weight: 63 kDa).

Not yet tested in other applications.

Optimal dilutions/concentrations should be determined by the end user.

Target

Function

May be the master regulator of the CoA biosynthesis.

Tissue specificity

Ubiquitous.

Pathway

Cofactor biosynthesis; coenzyme A biosynthesis; CoA from (R)-pantothenate: step 1/5.

Involvement in disease

Defects in PANK2 are the cause of neurodegeneration with brain iron accumulation type 1 (NBIA1) [MIM:234200]; also known as pantothenate kinase-associated neurodegeneration (PKAN) or Hallervorden-Spatz syndrome (HSS). It is an autosomal recessive neurodegenerative disorder associated with iron accumulation in the brain, primarily in the basal ganglia. Clinical manifestations include progressive muscle spasticity, hyperreflexia, muscle rigidity, dystonia, dysarthria, and intellectual deterioration which progresses to severe dementia over several years. It is clinically classified into classic, atypical, and intermediate phenotypes. Classic forms present with onset in the first decade, rapid progression, loss of independent ambulation within 15 years. Atypical forms have onset in the second decade, slow progression, maintenance of independent ambulation up to 40 years later. Intermediate forms manifest onset in the first decade with slow progression or onset in the second decade with rapid progression. Patients with early onset tend to also develop pigmentary retinopathy, whereas those with later onset tend to also have speech disorders and psychiatric features. All patients have the 'eye of the tiger' sign on brain MRI.

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 NBIA1.

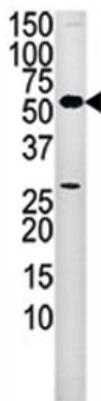
Sequence similarities

Belongs to the type II pantothenate kinase family.

Cellular localization

Cytoplasm and Mitochondrion.

Images



Western blot - Anti-PANK2 antibody (ab71381)

Anti-PANK2 antibody (ab71381) at 1/40 dilution + mouse liver tissue lysate at 35 μ g

Predicted band size: 63 kDa

Observed band size: 63 kDa

Additional bands at: 30 kDa. We are unsure as to the identity of these extra bands.

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