



ANT4 Monoclonal Antibody

Catalog No	YP-mAb-16374
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB
Gene Name	SLC25A31
Immunogen	The antiserum was produced against synthesized peptide derived from human SLC25A31. AA range:131-180
Specificity	ANT4 Monoclonal Antibody detects endogenous levels of ANT4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Monoclonal, Mouse,IgG
Purification	The antibody was affinity-purified from mouse antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	WB 1:500-1:2000
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	AAC4;Adenine nucleotide translocator 4;ADP;ATP carrier protein 4;ADP/ATP translocase 4;ADT4_HUMAN;ANT 4;ANT4;SFEC;Slc25a31;Solute carrier family 25 member 31;Sperm flagellar energy carrier protein
Observed Band	35kD
Calculated Molecular Weight	35kD
Cell Pathway	Mitochondrion inner membrane ; Multi-pass membrane protein . Membrane ; Multi-pass membrane protein . Cell projection, cilium, flagellum membrane ; Multi-pass membrane protein . In sperm flagellum this protein is located in the fibrous sheath, a non-mitochondrial region (PubMed:17137571). May localize to non-mitochondrial membranes (PubMed:27641616). .
Tissue Specificity	Expressed in brain, liver, sperm and testis (PubMed:15670820, PubMed:17137571). In testis, expressed at higher level in spermatocytes, while it is expressed at lower level in spermatogonial cells (PubMed:17681941). Expressed in erythrocytes (at protein level) (PubMed:27641616).
Function	function:Catalyzes the exchange of ADP and ATP across the mitochondrial inner membrane. May serve to mediate energy generating and energy consuming processes in the distal flagellum, possibly as a nucleotide shuttle between flagellar glycolysis, protein phosphorylation and mechanisms of



motility.,similarity:Belongs to the mitochondrial carrier family.,similarity:Contains 3 Solcar repeats.,subcellular location:In sperm flagellum this protein is located in the fibrous sheath, a non-mitochondrial region.,tissue specificity:Expressed in brain, liver, sperm and testis.,

Background

The protein encoded by this gene is a member of the ADP/ATP carrier family of proteins that exchange cytosolic ADP for matrix ATP in the mitochondria. Cells over-expressing this gene have been shown to display an anti-apoptotic phenotype. This protein is also thought to play a role in spermatogenesis, where it is believed to associate with a part of the flagellar cytoskeleton and with glycolytic enzymes. Male mice with mutations in the mouse ortholog of this gene are sterile and spermatocytes display an early meiotic arrest phenotype. Alternative splicing results in multiple transcript variants encoding different isoforms. [provided by RefSeq, Jan 2016],

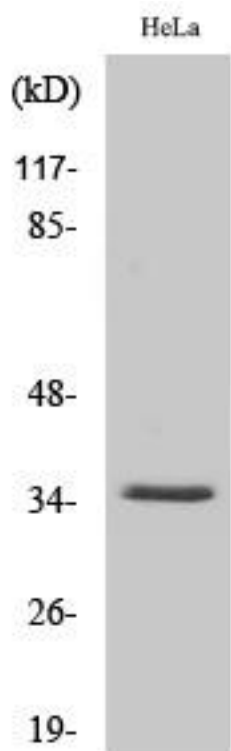
matters needing attention

Avoid repeated freezing and thawing!

Usage suggestions

This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Western Blot analysis of various cells using ANT4 Monoclonal Antibody