



ANT4 Polyclonal Antibody

Catalog No	YP-Ab-16374
Isotype	IgG
Reactivity	Human;Mouse
Applications	WB;IHC;IF;ELISA
Gene Name	SLC25A31
Protein Name	ADP/ATP translocase 4
Immunogen	The antiserum was produced against synthesized peptide derived from human SLC25A31. AA range:131-180
Specificity	ANT4 Polyclonal Antibody detects endogenous levels of ANT4 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA 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	Western Blot: 1/500 - 1/2000. Immunohistochemistry: 1/100 - 1/300. Immunofluorescence: 1/200 - 1/1000. ELISA: 1/40000. Not yet tested in other applications.
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	SLC25A31; AAC4; ANT4; SFEC; ADP/ATP translocase 4; ADP; ATP carrier protein 4; Adenine nucleotide translocator 4; ANT 4; Solute carrier family 25 member 31; Sperm flagellar energy carrier protein
Observed Band	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

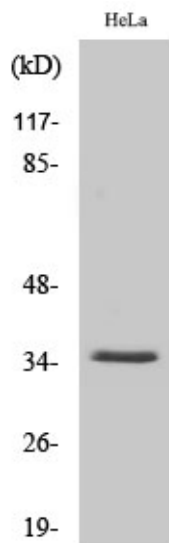
Avoid repeated freezing and thawing!

Usage suggestions

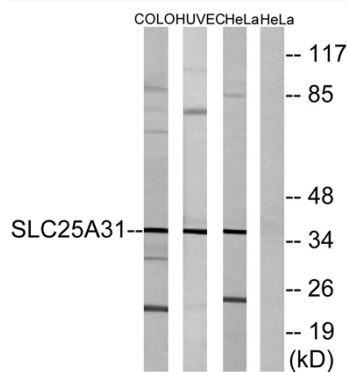
This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.



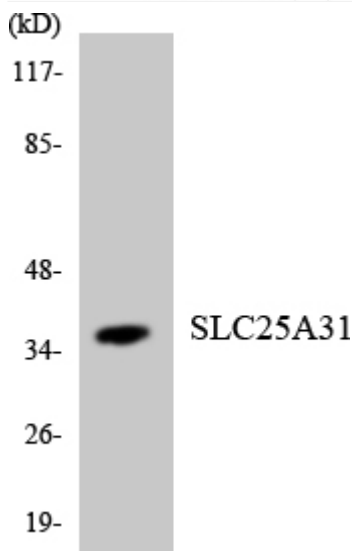
Products Images



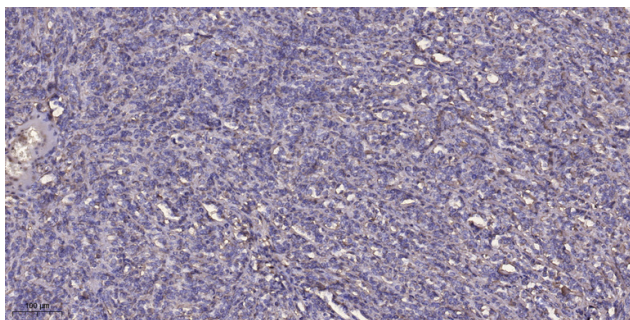
Western Blot analysis of various cells using ANT4 Polyclonal Antibody diluted at 1:500



Western blot analysis of lysates from HeLa, HUVEC, and COLO cells, using SLC25A31 Antibody. The lane on the right is blocked with the synthesized peptide.



Western blot analysis of the lysates from K562 cells using SLC25A31 antibody.



Immunohistochemical analysis of paraffin-embedded human Colon cancer. 1, Antibody was diluted at 1:200(4° overnight). 2, Tris-EDTA, pH9.0 was used for antigen retrieval. 3, Secondary antibody was diluted at 1:200(room temperature, 45min).