



Rabbit Anti-ANT1+ANT2+ANT3+ANT4 antibody

SL9567R

Product Name:	ANT1+ANT2+ANT3+ANT4
Chinese Name:	腺嘌呤核苷酸Transporter1、2、3、4抗体
Alias:	ATP carrier protein 1; ADP ATP carrier protein heart/skeletal muscle isoform T1; ADP/ATP translocase 1; ADT1_HUMAN; ANT 1; ANT; ANT1; ATP carrier protein 2; ADP ATP carrier protein heart/skeletal muscle isoform T2; ADP/ATP translocase 2; ADT2_HUMAN; ANT 2; ANT; ATP carrier protein 3; ADP ATP carrier protein heart/skeletal muscle isoform T3; ADP/ATP translocase 3; ADT3_HUMAN; ANT3; ATP carrier protein 4; ADP ATP carrier protein heart/skeletal muscle isoform T4; ADP/ATP translocase 4; ADT4_HUMAN; ANT 4;ANT4.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Horse,Rabbit,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	33kDa
Cellular localization:	cytoplasmicThe cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human ANT1/2/3/4:51-150/298
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	Adenine nucleotide translocator (ANT) and the voltage-dependent anion-selective

channel proteins 1 and 2 (VDAC1 and VDAC2) are components of the permeability transition pore complex (PTPC) of the mitochondrial inner and outer membranes, respectively. Formation of PTPCs, the subsequent dissipation of mitochondrial inner membrane potential and release of cytochrome c through the outer mitochondrial membrane are critical events in the early stages of apoptosis. Bax, a proapoptotic protein, has been shown to act upon ANT to induce the dissipation of mitochondrial inner membrane potential. ANT1 has a role in the maintenance of mitochondrial DNA by catalyzing the exchange of ADP and ATP across the mitochondrial inner membrane.

Function:

Catalyzes the exchange of ADP and ATP across the mitochondrial inner membrane. As part of the mitotic spindle-associated MMXD complex it may play a role in chromosome segregation.

Subunit:

Found in a complex with ARL2, ARL2BP and SLC25A4. Interacts with ARL2BP (By similarity). Homodimer. Interacts with HIV-1 Vpr.

Subcellular Location:

Mitochondrion inner membrane; Multi-pass membrane protein.

DISEASE:

Defects in SLC25A4 are a cause of progressive external ophthalmoplegia with mitochondrial DNA deletions autosomal dominant type 2 (PEOA2) [MIM:609283]. Progressive external ophthalmoplegia is characterized by progressive weakness of ocular muscles and levator muscle of the upper eyelid. In a minority of cases, it is associated with skeletal myopathy, which predominantly involves axial or proximal muscles and which causes abnormal fatigability and even permanent muscle weakness. Ragged-red fibers and atrophy are found on muscle biopsy. A large proportion of chronic ophthalmoplegias are associated with other symptoms, leading to a multisystemic pattern of this disease. Additional symptoms are variable, and may include cataracts, hearing loss, sensory axonal neuropathy, ataxia, depression, hypogonadism, and parkinsonism.

Similarity:

Belongs to the mitochondrial carrier family.

SWISS:

P12235 Q9H0C2

Gene ID:

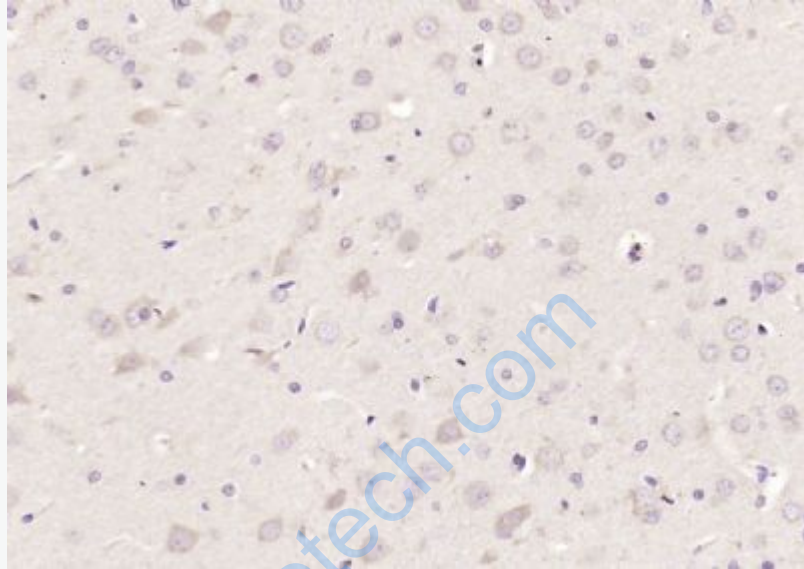
291 83447

Database links:

UniProtKB/Swiss-Prot: P12235.4 UniProtKB/Swiss-Prot: Q9H0C2.1

Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.



Picture:

Paraformaldehyde-fixed, paraffin embedded (rat brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (ANT1+ANT2+ANT3+ANT4) Polyclonal Antibody, Unconjugated (SL9567R) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructions and DAB staining.