

SLC25A6 antibody - N-terminal region

Rabbit Polyclonal Antibody Catalog # AI14302

Specification

SLC25A6 antibody - N-terminal region - Product Information

WB Application

Primary Accession **060RN9**

Other Accession NM 001636, NP 001627

Human, Mouse, Rat, Rabbit, Pig, Goat, Reactivity Sheep, Horse, Bovine, Guinea Pig, Dog

Human, Chicken, Sheep, Dog

Host Rabbit Clonality **Polyclonal** Calculated MW 33kDa KDa

SLC25A6 antibody - N-terminal region - Additional Information

Gene ID 403155

Alias Symbol

Predicted

ANT3, ANT3Y, MGC17525, AAC3

Other Names

ADP/ATP translocase 3, ADP, ATP carrier protein 3, Adenine nucleotide translocator 3, ANT 3, Solute carrier family 25 member 6, ADP/ATP translocase 3, N-terminally processed, SLC25A6, ANT3

Format

Liquid. Purified antibody supplied in 1x PBS buffer with 0.09% (w/v) sodium azide and 2% sucrose.

Reconstitution & Storage

Add 50 ul of distilled water. Final anti-SLC25A6 antibody concentration is 1 mg/ml in PBS buffer with 2% sucrose. For longer periods of storage, store at 20°C. Avoid repeat freeze-thaw cycles.

Precautions

SLC25A6 antibody - N-terminal region is for research use only and not for use in diagnostic or therapeutic procedures.

SLC25A6 antibody - N-terminal region - Protein Information

Name SLC25A6 {ECO:0000250|UniProtKB:P12236}

Function

ADP:ATP antiporter that mediates import of ADP into the mitochondrial matrix for ATP synthesis, and export of ATP out to fuel the cell (By similarity). Cycles between the cytoplasmic-open state (cstate) and the matrix-open state (m-state): operates by the alternating access mechanism with a single substrate-binding site intermittently exposed to either the cytosolic (c-state) or matrix (m-state) side of the inner mitochondrial membrane (By similarity). In addition to its ADP:ATP antiporter activity, also involved in mitochondrial uncoupling and mitochondrial permeability



transition pore (mPTP) activity (By similarity). Plays a role in mitochondrial uncoupling by acting as a proton transporter: proton transport uncouples the proton flows via the electron transport chain and ATP synthase to reduce the efficiency of ATP production and cause mitochondrial thermogenesis. Proton transporter activity is inhibited by ADP:ATP antiporter activity, suggesting that SLC25A6/ANT3 acts as a master regulator of mitochondrial energy output by maintaining a delicate balance between ATP production (ADP:ATP antiporter activity) and thermogenesis (proton transporter activity). Proton transporter activity requires free fatty acids as cofactor, but does not transport it (By similarity). Also plays a key role in mPTP opening, a non-specific pore that enables free passage of the mitochondrial membranes to solutes of up to 1.5 kDa, and which contributes to cell death (By similarity). It is however unclear if SLC25A6/ANT3 constitutes a pore-forming component of mPTP or regulates it (By similarity).

Cellular Location

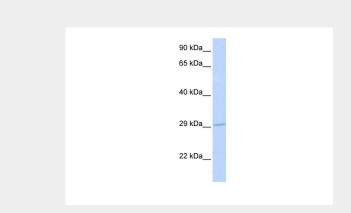
Mitochondrion inner membrane {ECO:0000250|UniProtKB:P02722}; Multi-pass membrane protein. Membrane {ECO:0000250|UniProtKB:P12236}; Multi-pass membrane protein. Note=The complex formed with ARL2BP, ARL2 and SLC25A6/ANT3 is expressed in mitochondria (By similarity). May localize to non-mitochondrial membranes (By similarity) {ECO:0000250|UniProtKB:P12235}

SLC25A6 antibody - N-terminal region - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

SLC25A6 antibody - N-terminal region - Images



WB Suggested Anti-SLC25A6 Antibody Titration: 0.2-1 µg/ml

ELISA Titer: 1:1562500

Positive Control: Human heart

SLC25A6 antibody - N-terminal region - References

Lee H.Y., et al. Submitted (JAN-2004) to the EMBL/GenBank/DDBJ databases.