

SLC25A6 antibody - N-terminal region

Rabbit Polyclonal Antibody

Catalog # AI14302

Product Information

Application	WB
Primary Accession	Q6QRN9
Other Accession	NM_001636 , NP_001627
Reactivity	Human, Mouse, Rat, Rabbit, Zebrafish, Pig, Goat, Dog, Guinea Pig, Horse, Bovine, Sheep
Predicted Host	Human, Zebrafish, Chicken, Dog, Sheep
Clonality	Rabbit
Calculated MW	Polyclonal 32910

Additional Information

Gene ID	403155
Alias Symbol Other Names	ANT3, ANT3Y, MGC17525, AAC3 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.

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 (c- state) 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).

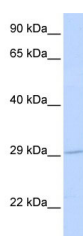
Cellular Location

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}

References

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

Images



WB Suggested Anti-SLC25A6 Antibody Titration: 0.2-1
µg/ml
ELISA Titer: 1:1562500
Positive Control: Human heart

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.