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SLC25A11 Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP51792

Product Information

Application	WB
Primary Accession	Q02978
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	34062

Additional Information

Gene ID	8402
Other Names	Mitochondrial 2-oxoglutarate/malate carrier protein, OGCP, Solute carrier family 25 member 11, SLC25A11, SLC20A4
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the center region of human SLC25A11. The exact sequence is proprietary.
Dilution	WB~~1:1000
Format	0.01M PBS, pH 7.2, 0.09% (W/V) Sodium azide, Glycerol 50%
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

Name	SLC25A11
Synonyms	SLC20A4
Function	Catalyzes the transport of 2-oxoglutarate (alpha- oxoglutarate) across the inner mitochondrial membrane in an electroneutral exchange for malate (PubMed:25637873, PubMed:38937634). Can also exchange 2-oxoglutarate for other dicarboxylic acids such as malonate, succinate, maleate and oxaloacetate, although with lower affinity (By similarity). Substrate exchange across the membrane occurs consecutively with one substrate being transported first, then dissociating from the substrate binding site before the second substrate binds for transport in the opposite direction (PubMed:38937634). Does not transport glutathione (PubMed:25637873). Contributes to several metabolic processes, including the malate- aspartate shuttle, the oxoglutarate/isocitrate shuttle, gluconeogenesis from lactate, and nitrogen metabolism (By similarity). Maintains mitochondrial fusion and fission events, and the organization and morphology of cristae

	(PubMed:21448454). Involved in the regulation of apoptosis (By similarity).
Cellular Location	Mitochondrion inner membrane {ECO:0000250|UniProtKB:P97700}; Multi-pass membrane protein
Tissue Location	Most highly expressed in the heart.

Background

Catalyzes the transport of 2-oxoglutarate across the inner mitochondrial membrane in an electroneutral exchange for malate or other dicarboxylic acids, and plays an important role in several metabolic processes, including the malate-aspartate shuttle, the oxoglutarate/isocitrate shuttle, in gluconeogenesis from lactate, and in nitrogen metabolism.

References

Iacobazzi V.,et al.DNA Seq. 3:79-88(1992).
Yu W.,et al.Submitted (JUN-1998) to the EMBL/GenBank/DDBJ databases.
Zody M.C.,et al.Nature 440:1045-1049(2006).
Bienvenut W.V.,et al.Submitted (JUN-2005) to UniProtKB.
Gauci S.,et al.Anal. Chem. 81:4493-4501(2009).

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