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# SLC25A27 Antibody (Center) Blocking Peptide

**Synthetic peptide**
**Catalog # BP9260c**

## Specification

### SLC25A27 Antibody (Center) Blocking Peptide - Product Information

Primary Accession O95847

### SLC25A27 Antibody (Center) Blocking Peptide - Additional Information

**Gene ID** 9481

**Other Names**
Mitochondrial uncoupling protein 4, UCP 4, Solute carrier family 25 member 27, SLC25A27, UCP4

**Target/Specificity**
The synthetic peptide sequence used to generate the antibody <a href=/products/AP9260c>AP9260c</a> was selected from the Center region of human SLC25A27. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

### SLC25A27 Antibody (Center) Blocking Peptide - Protein Information

**Name** SLC25A27

**Synonyms** UCP4 {ECO:0000303|PubMed:10025957}

**Function**
Facilitates proton transport across the inner mitochondrial membrane and may dissipate excessive proton gradient associated with oxidative and metabolic stress at neuronal synapses. Regulates glutamate-induced proton conductance in astrocytes, shifting the energy metabolism toward aerobic glycolysis and lactate transfer to neurons for ATP synthesis. Can transport chloride ions with lower efficiency. The transport mechanism remains to be elucidated.

**Cellular Location**
Mitochondrion inner membrane; Multi-pass membrane protein. Note=Localizes to neuronal cell body and processes Within mitochondrial inner membrane, it is mainly observed in the inner boundary membrane locally separated from F(1)F(0) ATP synthase, which is preferentially localized

in cristae. {ECO:0000250|UniProtKB:Q9D6D0}

**Tissue Location**
Found in adult and fetal brain. Present in most of the brain tissues, with low levels in spinal chord, corpus callosum and substantia nigra.

## SLC25A27 Antibody (Center) Blocking Peptide - Protocols

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

- Blocking Peptides

## SLC25A27 Antibody (Center) Blocking Peptide - Images

## SLC25A27 Antibody (Center) Blocking Peptide - Background

SLC25A27 is members of the larger family of mitochondrial anion carrier proteins (MACP). UCPs separate oxidative phosphorylation from ATP synthesis with energy dissipated as heat, also referred to as the mitochondrial proton leak. UCPs facilitate the transfer of anions from the inner to the outer mitochondrial membrane and the return transfer of protons from the outer to the inner mitochondrial membrane. They also reduce the mitochondrial membrane potential in mammalian cells.

## SLC25A27 Antibody (Center) Blocking Peptide - References

Chu,A.C., et.al, Free Radic. Biol. Med. 46 (6), 810-820 (2009)Szolnoki,Z., et.al, Neuromolecular Med. 11 (2), 101-105 (2009)Starr,J.M., et.al, Mech. Ageing Dev. 129 (12), 745-751 (2008)