

UCP3 Polyclonal Antibody
Catalog # AP72997**Specification****UCP3 Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	P55916
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal

UCP3 Polyclonal Antibody - Additional Information**Gene ID** 7352**Other Names**

UCP3; SLC25A9; Mitochondrial uncoupling protein 3; UCP 3; Solute carrier family 25 member 9

Dilution

WB~~Western Blot: 1/500 - 1/2000. ELISA: 1/10000. Not yet tested in other applications.

Format

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

Storage Conditions

-20°C

UCP3 Polyclonal Antibody - Protein Information**Name** UCP3 {ECO:0000303|PubMed:9180264, ECO:0000312|HGNC:HGNC:12519}**Function**

Putative transmembrane transporter that plays a role in mitochondrial metabolism via an as yet unclear mechanism (PubMed:21775425, PubMed:36114012). Originally, this mitochondrial protein was thought to act as a proton transmembrane transporter from the mitochondrial intermembrane space into the matrix, causing proton leaks through the inner mitochondrial membrane, thereby uncoupling mitochondrial membrane potential generation from ATP synthesis (PubMed:11171965, PubMed:12670931, PubMed:12734183, PubMed:9305858). However, this function is controversial and uncoupling may not be the function, or at least not the main function, but rather a consequence of more conventional metabolite transporter activity (PubMed:11707458).

Cellular Location

Mitochondrion inner membrane {ECO:0000250|UniProtKB:P56501}; Multi-pass membrane protein

Tissue Location

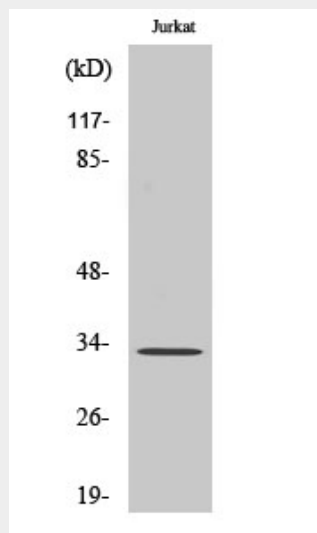
Only in skeletal muscle and heart (PubMed:9305858). Also expressed in white and brown adipose tissues (PubMed:9305858). Is more expressed in glycolytic than in oxidative skeletal muscles

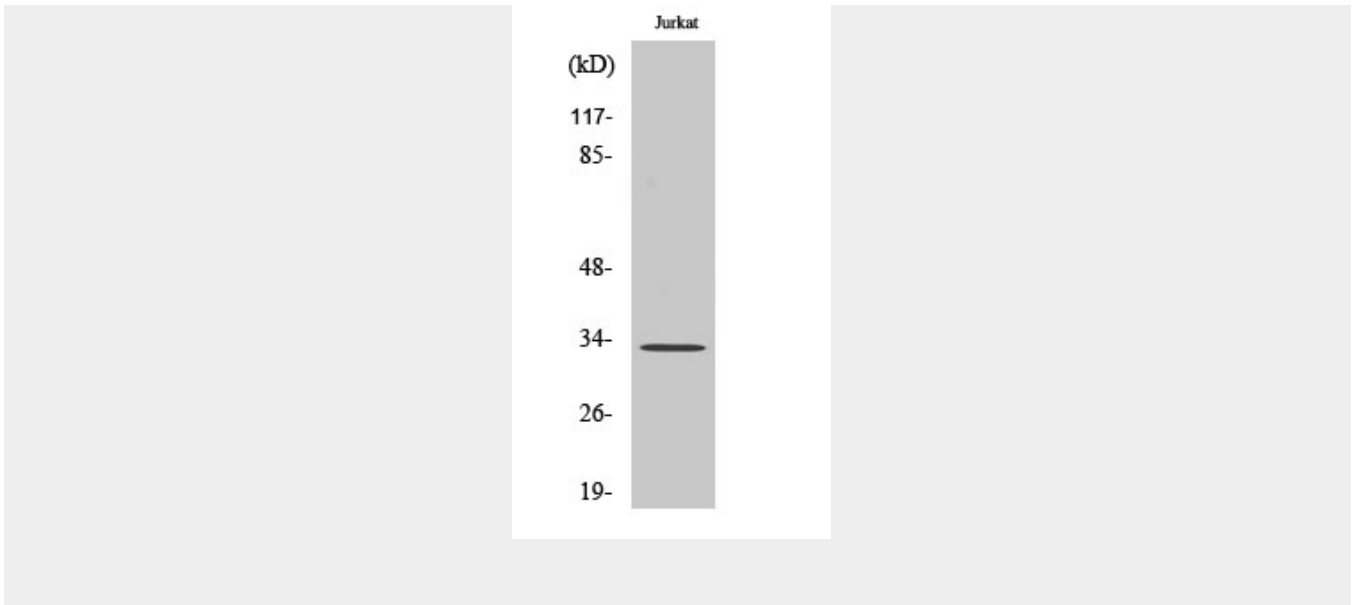
UCP3 Polyclonal Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

UCP3 Polyclonal Antibody - Images





UCP3 Polyclonal Antibody - Background

UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation. As a result, energy is dissipated in the form of heat. May play a role in the modulation of tissue respiratory control. Participates in thermogenesis and energy balance.