

UCP1+UCP3 Rabbit mAb

Catalog NO.: A19526 **Recombinant**

Basic Information

Observed MW

Refer to figures

Calculated MW

34kDa

Category

Monoclonal Antibodies

Applications

IF-P, IHC-P, ELISA

Cross-Reactivity

Mouse, Rat

Conjugation

Unconjugated

Clone number

ARC2304

Background

Mitochondrial protein responsible for thermogenic respiration, a specialized capacity of brown adipose tissue and beige fat that participates in non-shivering adaptive thermogenesis to temperature and diet variations and more generally to the regulation of energy balance. Functions as a long-chain fatty acid/LCFA and proton symporter, simultaneously transporting one LCFA and one proton through the inner mitochondrial membrane. However, LCFAs remaining associated with the transporter via their hydrophobic tails, it results in an apparent transport of protons activated by LCFAs. Thereby, dissipates the mitochondrial proton gradient and converts the energy of substrate oxydation into heat instead of ATP. Regulates the production of reactive oxygen species/ROS by mitochondria.

Recommended Dilutions

IF-P 1:50 - 1:200

IHC-P 1:50 - 1:200

ELISA

Recommended starting concentration is 1 µg/mL.
Please optimize the concentration based on your specific assay requirements.

Immunogen Information

Gene ID

22227/22229

Swiss Prot

P12242/P56501

Immunogen

Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms

A1385626; Slc25a7; Ucp; UCP1+UCP3

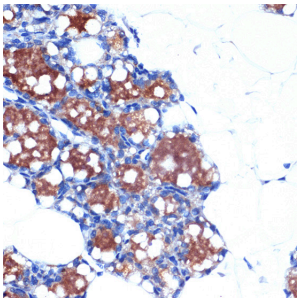
Contact

Product Information

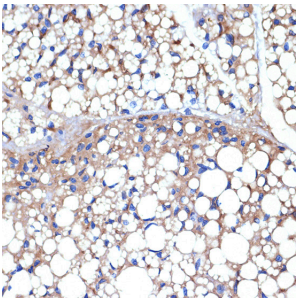
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Source	Isotype	Purification
Rabbit	IgG	Affinity purification
Storage		
Store at -20°C. Avoid freeze / thaw cycles.		
Buffer: PBS containing 50% glycerol and 0.05% BSA, preserved with proclin300 or sodium azide (as specified on the Certificate of Analysis), pH 7.3.		

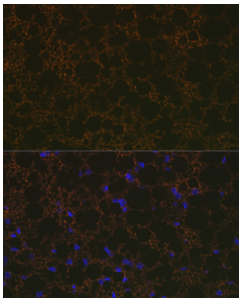
Validation Data



Immunohistochemistry analysis of paraffin-embedded Rat brown adipose using UCP1+UCP3 Rabbit mAb (A19526) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.



Immunohistochemistry analysis of paraffin-embedded Mouse brown adipose using UCP1+UCP3 Rabbit mAb (A19526) at dilution of 1:100 (40x lens). Microwave antigen retrieval performed with 0.01M Tris/EDTA Buffer (pH 9.0) prior to IHC staining.



Immunofluorescence analysis of paraffin-embedded rat brown adipose using UCP1+UCP3 Rabbit mAb (A19526) at dilution of 1:100 (40x lens). Secondary antibody: Cy3-conjugated Goat anti-Rabbit IgG (H+L) (AS007) at 1:500 dilution. Blue: DAPI for nuclear staining.

