

# ARG55180 anti-UCP1 antibody

Package: 50 μg Store at: -20°C

# Summary

Product Description	Rabbit Polyclonal antibody recognizes UCP1
Tested Reactivity	Hu, Ms, Rat
Tested Application	ELISA, IHC-P, WB
Host	Rabbit
Clonality	Polyclonal
lsotype	lgG
Target Name	UCP1
Species	Human
Immunogen	Synthetic peptide (17 aa) within the last 50 aa of Human UCP1.
Conjugation	Un-conjugated
Alternate Names	UCP; SLC25A7; Thermogenin; Mitochondrial brown fat uncoupling protein 1; Solute carrier family 25 member 7; UCP 1

#### **Application Instructions**

Application table	Application	Dilution
	ELISA	Assay-dependent
	IHC-P	Assay-dependent
	WB	1 - 2 μg/ml
Application Note	* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	
Positive Control	HeLa Cell Lysate	

# Properties

Form	Liquid
Purification	Affinity purification with immunogen.
Buffer	PBS and 0.02% Sodium azide
Preservative	0.02% Sodium azide
Concentration	1 mg/ml
Storage instruction	For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

#### Bioinformation

Gene Symbol	UCP1
Gene Full Name	uncoupling protein 1 (mitochondrial, proton carrier)
Background	The mitochondrial brown fat uncoupling protein 1 (UCP1) is a member of the 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. UCP1 is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat.
Function	UCP are mitochondrial transporter proteins that create proton leaks across the inner mitochondrial membrane, thus uncoupling oxidative phosphorylation from ATP synthesis. As a result, energy is dissipated in the form of heat. [UniProt]
Research Area	Cancer antibody; Metabolism antibody; Signaling Transduction antibody
Calculated Mw	33 kDa
PTM	May undergo sulfenylation upon cold exposure. May increase the sensitivity of UCP1 thermogenic function to the activation by noradrenaline probably through structural effects. May undergo ubiquitin-mediated proteasomal degradation.

Images



#### ARG55180 anti-UCP1 antibody WB image

Western blot: HeLa cell lysate stained with ARG55180 anti-UCP1 antibody at 1 ug/ml dilution.



#### ARG55180 anti-UCP1 antibody IHC image

Immunohistochemistry: UCP1 in human liver tissue stained with ARG55180 anti-UCP1 antibody at 2.5 ug/ml dilution.