Datasheet for ABIN6149883

anti-UCP1 antibody (AA 1-307)

7 Images

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Overview

Quantity:	100 µL
Target:	UCP1
Binding Specificity:	AA 1-307
Reactivity:	Human
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This UCP1 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (IHC), Immunofluorescence (IF)

Product Details

Immunogen:	Recombinant fusion protein containing a sequence corresponding to amino acids 1-307 of human UCP1 (NP_068605.1).
Sequence:	MGGLTASDVH PTLGVQLFSA GIAACLADVI TFPLDTAKVR LQVQGECPTS SVIRYKGVLG TITAVVKTEG RMKLYSGLPA GLQRQISSAS LRIGLYDTVQ EFLTAGKETA PSLGSKILAG LTTGGVAVFI GQPTEVVKVR LQAQSHLHGI KPRYTGTYNA YRIIATTEGL TGLWKGTTPN LMRSVIINCT ELVTYDLMKE AFVKNNILAD DVPCHLVSAL IAGFCATAMS SPVDVVKTRF INSPPGQYKS VPNCAMKVFT NEGPTAFFKG LVPSFLRLGS WNVIMFVCFE QLKRELSKSR QTMDCAT
Isotype:	IgG
Cross-Reactivity:	Human, Mouse, Rat
Characteristics:	Polyclonal Antibodies

Target Details

Target:	UCP1
Alternative Name:	UCP1 (UCP1 Products)
Background:	Mitochondrial uncoupling proteins (UCP) are members 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. Tissue specificity occurs for the different UCPs and the exact methods of how UCPs transfer H+/OH- are not known. UCPs contain the three homologous protein domains of MACPs. This gene is expressed only in brown adipose tissue, a specialized tissue which functions to produce heat.,UCP1,SLC25A7,UCP,Cancer,Signal Transduction,Endocrine & Metabolism,Mitochondrial metabolism,Mitochondrial markers,Lipid Metabolism,Endocrine and metabolic diseases,Obesity,Neuroscience,Neurodegenerative Diseases,UCP1
Molecular Weight:	33 kDa
Gene ID:	7350
UniProt:	P25874
Pathways:	Proton Transport, Brown Fat Cell Differentiation

Application Details

Application Notes:	WB,1:500 - 1:2000,IHC,1:50 - 1:200,IF,1:50 - 1:200
Comment:	HIGH QUALITY
Restrictions:	For Research Use only

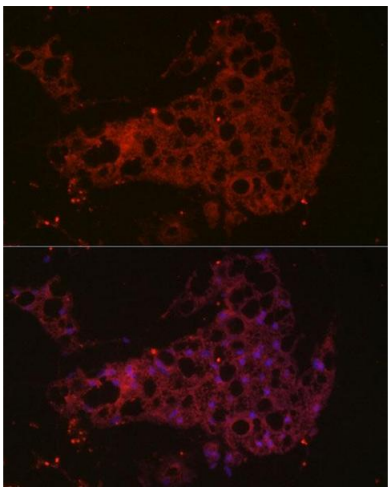
Handling

Format:	Liquid
Buffer:	PBS with 0.02 % sodium azide,50 % glycerol, pH 7.3.
Preservative:	Sodium azide
Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Storage:	-20 °C

Handling

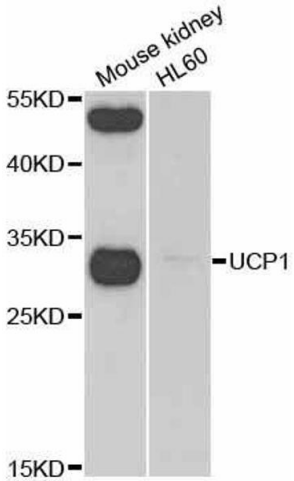
Storage Comment:	Store at -20°C. Avoid freeze / thaw cycles.

Images



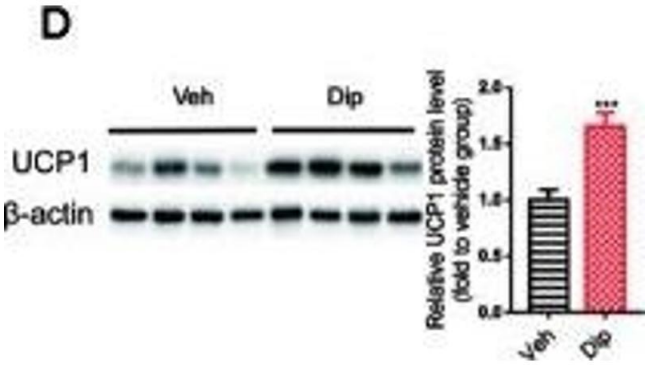
Immunofluorescence

Image 1. Immunofluorescence analysis of mouse brown adipose cells using UCP1 Rabbit pAb (ABIN6128899, ABIN6149883, ABIN6149885 and ABIN6221561) at dilution of 1:50 (40x lens). Blue: DAPI for nuclear staining.



Western Blotting

Image 2. Western blot analysis of extracts of various cell lines, using UCP1 antibody.



Western Blotting

Image 3. Diphyllin enhances brown/beige thermogenesis and reduces adipocyte size in DIO mice. (A-C) Relative mRNA levels of the indicated genes after diphyllin treatment in iBAT, iWAT and eWAT (n=6). (D-F) Western blot analysis and relative integrated density of UCP1 protein in iBAT, iWAT, and eWAT of DIO mice after treatment (n=6). (G-I) Representative HE staining images and statistical diagram of the cell surface of BAT, iWAT, and eWAT. Scale bar = 100 μm for x10. *p < 0.05, **p < 0.01, and ***p < 0.001. - figure provided by CiteAb. Source: PMID33424769

Please check the product details page for more images. Overall 7 images are available for ABIN6149883.