## **UCP2** Conjugated Antibody

Catalog No: #C40280



Package Size: #C40280-AF350 100ul #C40280-AF405 100ul #C40280-AF488 100ul

#C40280-AF555 100ul #C40280-AF594 100ul #C40280-AF647 100ul

#C40280-AF680 100ul #C40280-AF750 100ul #C40280-Biotin 100ul

Orders: order@signalwayantibody.com Support: tech@signalwayantibody.com

## Description

Product Name	UCP2 Conjugated Antibody
Host Species	Rabbit
Clonality	Polyclonal
Species Reactivity	Hu
Specificity	The antibody detects endogenous levels of total UCP2 protein.
Immunogen Description	Synthetic peptide of human uncoupling protein 2 (mitochondrial, proton carrier)
Conjugates	Biotin AF350 AF405 AF488 AF555 AF594 AF647 AF680 AF750
Other Names	UCPH; BMIQ4; SLC25A8
Accession No.	Swiss-Prot#:P55851 NCBI Gene ID:7351NCBI Protein#:NP_003346
Uniprot	P55851
GeneID	7351;
Excitation Emission	AF350: 346nm/442nm
	AF405: 401nm/421nm
	AF488: 493nm/519nm
	AF555: 555nm/565nm
	AF594: 591nm/614nm
	AF647: 651nm/667nm
	AF680: 679nm/702nm
	AF750: 749nm/775nm
Formulation	0.01M Sodium Phosphate, 0.25M NaCl, pH 7.6, 5mg/ml Bovine Serum Albumin, 0.02% Sodium Azide
Storage	Store at 4°C in dark for 6 months

## **Application Details**

Suggested Dilution:

AF350 conjugated: most applications: 1: 50 - 1: 250
AF405 conjugated: most applications: 1: 50 - 1: 250
AF488 conjugated: most applications: 1: 50 - 1: 250
AF555 conjugated: most applications: 1: 50 - 1: 250
AF594 conjugated: most applications: 1: 50 - 1: 250
AF647 conjugated: most applications: 1: 50 - 1: 250
AF680 conjugated: most applications: 1: 50 - 1: 250
AF750 conjugated: most applications: 1: 50 - 1: 250

 $Biotin \ conjugated: working \ with \ enzyme-conjugated \ streptavidin, \ most \ applications: \ 1:50 - 1:1,000$ 

## Background

Mitochondrial uncoupling proteins (UCP) are 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. 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 in many tissues, with the greatest expression in skeletal muscle. It is thought to play a role in nonshivering thermogenesis, obesity and diabetes. Chromosomal order is 5'-UCP3-UCP2-3'.?

Note: This product is for in vitro research use only