

Immunotag™ UCP2 Polyclonal Antibody

Antibody Specification	
Catalog No.	ITT4813
Product Description	Immunotag™ UCP2 Polyclonal Antibody
Size	50 µg, 100 µg
Conjugation	HRP, Biotin, FITC, Alexa Fluor® 350, Alexa Fluor® 405, Alexa Fluor® 488, Alexa Fluor® 555, Alexa Fluor® 594, Alexa Fluor® 647
IMPORTANT NOTE	This product is custom manufactured with a lead time of 3-4 weeks. Once in production, this item cannot be cancelled from an order and is not eligible for return.
Target Protein	UCP2
Clonality	Polyclonal
Storage/Stability	-20°C/1 year
Application	IHC-p,ELISA
Recommended Dilution	Immunohistochemistry: 1/100 - 1/300. ELISA: 1/10000. Not yet tested in other applications.
Concentration	1 mg/ml
Reactive Species	Human,Mouse,Rat
Host Species	Rabbit
Immunogen	Synthesized peptide derived from the Internal region of human UCP2
Specificity	UCP2 Polyclonal Antibody detects endogenous levels of UCP2 protein.
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen
Form	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Gene Name	UCP2
Accession No.	P55851 P70406 P56500
Alternate Names	UCP2; SLC25A8; Mitochondrial uncoupling protein 2; UCP 2; Solute carrier family 25 member 8; UCPH

Antibody Specification

Description	uncoupling protein 2(UCP2) Homo sapiens 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'. [prov
Protein Expression	Adipose tissue,B-cell,Lung,Placenta,Skeletal muscle,Spleen,
Subcellular Localization	mitochondrial inner membrane,integral component of membrane,mitochondrial membrane,
Protein Function	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.,polymorphism:Genetic variation in UCP2 influences susceptibility to obesity [MIM:607447]; also called body mass index quantitative trait locus type 4 (BMIQ4). Obesity is the most common nutritional disorder in Western society.,similarity:Belongs to the mitochondrial carrier family.,similarity:Contains 3 Solcar repeats.,subunit:Acts as a dimer forming a proton channel.,tissue specificity:Widely expressed in adult human tissues, including tissues rich in macrophages. Most expressed in white adipose tissue and skeletal muscle.,
Usage	For Research Use Only! Not for diagnostic or therapeutic procedures.