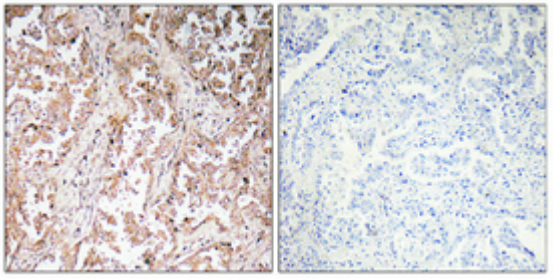
UCP2 Polyclonal Antibody

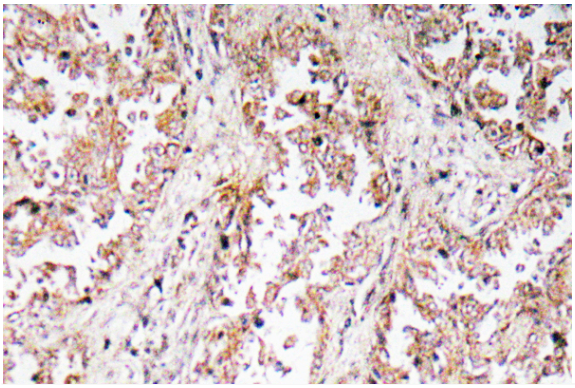
Catalog No	YP-Ab-16509
Isotype	IgG
Reactivity	Human;Mouse;Rat
Applications	WB;IHC;IF;ELISA
Gene Name	UCP2
Immunogen	The antiserum was produced against synthesized peptide derived from human UCP2. AA range:64-113
Specificity	UCP2 Polyclonal Antibody detects endogenous levels of UCP2 protein.
Formulation	Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% sodium azide.
Source	Polyclonal, Rabbit,IgG
Purification	The antibody was affinity-purified from rabbit antiserum by affinity-chromatography using epitope-specific immunogen.
Dilution	IHC: 1/100 - 1/300. ELISA: 1/10000.. IF 1:50-200
Concentration	1 mg/ml
Purity	≥90%
Storage Stability	-20°C/1 year
Synonyms	BMIQ4;Dicarboxylate carrier SLC25A8;SLC25A8;UCP 2;UCPH;UCP2; Mitochondrial uncoupling protein 2;Solute carrier family 25 member 8
Observed Band	
Calculated Molecular Weight	33kD
Cell Pathway	Mitochondrion inner membrane; Multi-pass membrane protein.
Tissue Specificity	Widely expressed in adult human tissues, including tissues rich in macrophages. Most expressed in white adipose tissue and skeletal muscle.
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.,

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'. [prov
matters needing attention	Avoid repeated freezing and thawing!
Usage suggestions	This product can be used in immunological reaction related experiments. For more information, please consult technical personnel.

Products Images



Immunohistochemical analysis of paraffin-embedded Human lung cancer. Antibody was diluted at 1:100(4° overnight). High-pressure and temperature Tris-EDTA,pH8.0 was used for antigen retrieval. Negetive contrl (right) obtaned from antibody was pre-absorbed by immunogen peptide.



Immunohistochemistry analysis of UCP2 antibody in paraffin-embedded human lung carcinoma tissue.

