



Rabbit Anti-UCP-2 antibody

SL20751R

Product Name:	UCP-2
Chinese Name:	Mitochondrion脱偶连蛋白2抗体
Alias:	Uncoupling Protein-2; UCP2; UCP 2; BMIQ4; Mitochondrial uncoupling protein 2; SLC25A8; UCPH; Uncoupling protein 2; Uncoupling protein 2 mitochondrial proton carrier; Solute carrier family 25 member 8; UCP2 HUMAN.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,Rabbit,Sheep,
Applications:	WB=1:500-2000IHC-P=1:400-800IHC-F=1:400-800ICC=1:100-500IF=1:100-500 (Paraffin sections need antigen repair) not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	34kDa
Cellular localization:	cytoplasmic
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human UCP-2:51-120/309
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.
PubMed:	PubMed
Product Detail:	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. UCP2 gene is expressed in many tissues, with the greatest expression in skeletal muscle. UCP2 is thought to play a role in non shivering thermogenesis, obesity and diabetes.

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.

Subunit:

Acts as a dimer forming a proton channel.

Subcellular Location:

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.

Similarity:

Belongs to the mitochondrial carrier family.
Contains 3 Solcar repeats.

SWISS:

P55851

Gene ID:

7351

Database links:

[Entrez Gene: 7351](#)Human

[Entrez Gene: 54315](#)Rat

[Omin: 601693](#)Human

[SwissProt: P55851](#)Human

[SwissProt: P56500](#)Rat

[Unigene: 80658](#)Human

[Unigene: 13333](#)Rat

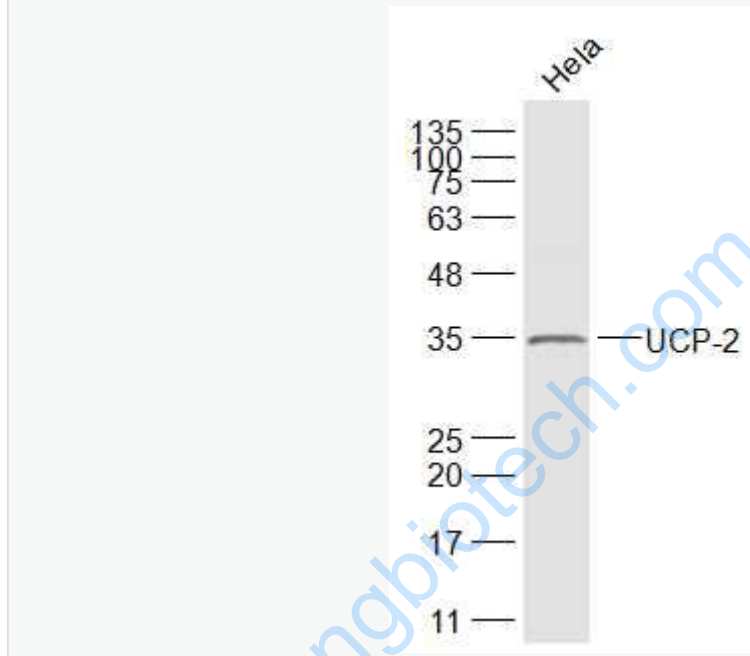
Important Note:

This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

UCP-2又称解耦联蛋白 2 (UCP2)是 1997年发现的一种新的解耦联蛋白,它是Mitochondrion内膜载体家族的一员。与其类似物UCP1相比

,UCP2在棕色脂肪组织中含量较低,但在体内分布广泛。解耦联蛋白(UCP)具有使Mitochondrion呼吸链解耦联作用,解耦联所释放的能量以热能的形式散发。在对UCP与产热关系的研究中,发现UCP2具有调节机体能量代谢的功能,并且可能是肥胖与2型Diabetes相关联的一个重要基因。

Picture:



Sample:

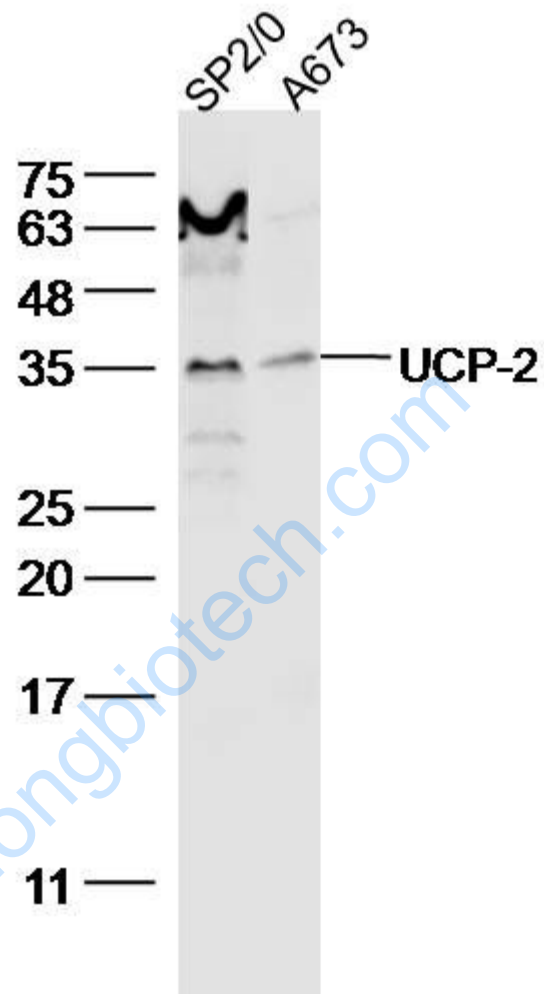
HeLa(Human) Cell Lysate at 30 ug

Primary: Anti-UCP-2 (SL20751R) at 1/1000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 34 kD

Observed band size: 34 kD



Sample:

SP2/0 cell(human) Lysate at 30 ug

A673 cell(human) Lysate at 30 ug

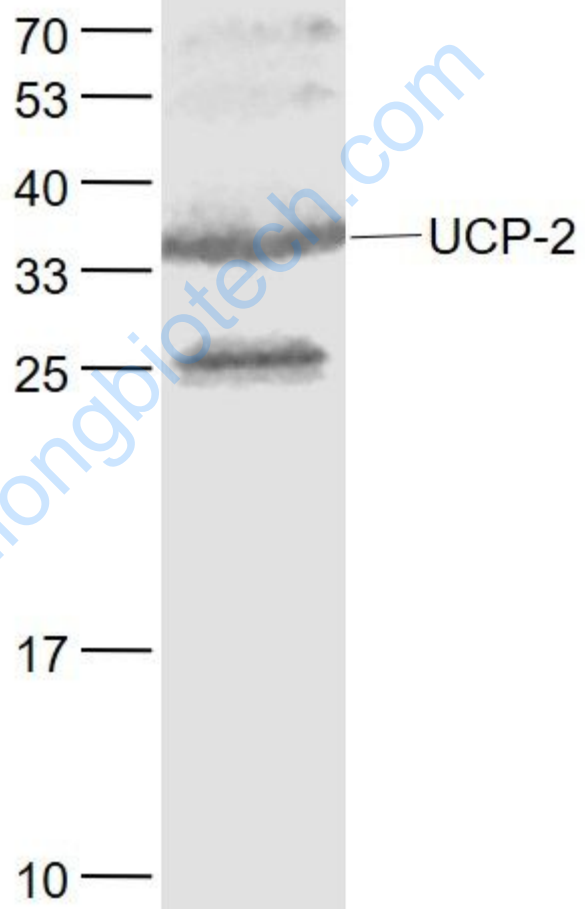
Primary: Anti- UCP2 (SL20751R) at 1/2000 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 34kD

Observed band size: 34kD

Skeletal muscle



Sample:

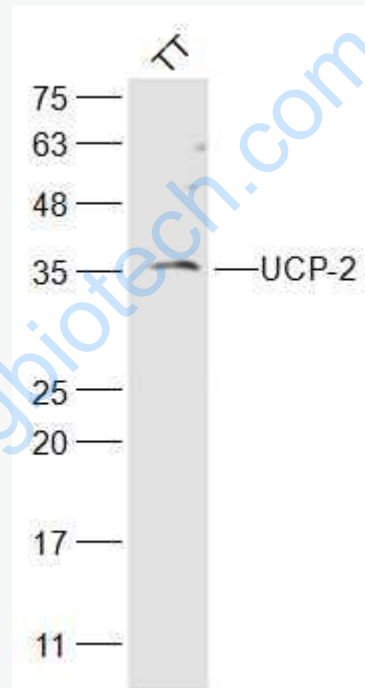
Skeletal muscle (Mouse) Lysate at 40 ug

Primary: Anti- UCP-2 (SL20751R) at 1/500 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 34 kD

Observed band size: 35 kD



Sample:

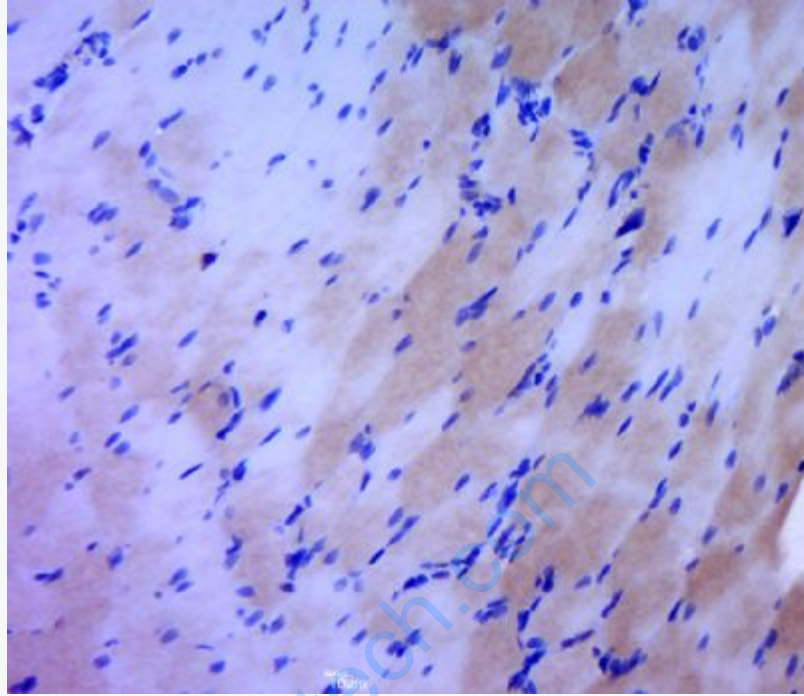
TT(Human) Cell Lysate at 30 ug

Primary: Anti-UCP-2 (SL20751R) at 1/300 dilution

Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution

Predicted band size: 34 kD

Observed band size: 34 kD



Paraformaldehyde-fixed, paraffin embedded (rat skeletal muscle); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (UCP-2) Polyclonal Antibody, Unconjugated (SL20751R) at 1:400 overnight at 4°C, followed by a conjugated secondary (sp-0023) for 20 minutes and DAB staining.