# **Elabscience**®

### **UCP2** Polyclonal Antibody

### catalog number: E-AB-92580

Note: Centrifuge before opening to ensure complete recovery of vial contents.

1:500-1:2000

Description	
Reactivity	Human;Mouse;Rat
Immunogen	Recombinant fusion protein of human UCP2
Host	Rabbit
Is otype	IgG
Purification	Affinity purification
Buffer	Phosphate buffered solution, pH 7.4, containing 0.05% stabilizer and 50% glycerol.
Applications	Recommended Dilution

WB

Data

## 

Western blot analysis of extracts of various cell lines using

UCP2 Polyclonal Antibody at 1:1000 dilution.

### Observed-MW:32 kDa Calculated-MW:33 kDa

Preparation & Storage	
Storage	Store at -20°C Valid for 12 months. Avoid freeze / thaw cycles.
Shipping	The product is shipped with ice pack, upon receipt, store it immediately at the
	temperature recommended.

#### 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'.