## For Research Use Only

## UCP1 Recombinant antibody

Catalog Number:83870-1-RR



**Basic Information** 

Catalog Number:

GenBank Accession Number: BC098168

**Purification Method:** 

83870-1-RR

Size:

Protein A purfication

1000  $\,\mu$  g/ml

GeneID (NCBI): 7350

CloneNo.: 240782F3

WB 1:5000-1:50000

Source:

**UNIPROT ID:** P25874

Recommended Dilutions:

Rabbit Isotype:

Full Name:

uncoupling protein 1 (mitochondrial,

Immunogen Catalog Number: AG20388

proton carrier) Calculated MW:

307 aa, 33 kDa

Observed MW: 33 kDa

**Applications** 

**Tested Applications:** 

WB, ELISA

Positive Controls:

Species Specificity:

human, mouse

WB: mouse brown adipose tissue,

## **Background Information**

UCP-1 (Mitochondrial uncoupling protein 1), is a mitochondrial transporter protein that creates proton leaks across  $the inner \, mit ochondrial \, membrane, thus \, uncoupling \, oxidative \, phosphorylation \, from \, ATP \, synthesis. \, It \, has \, been \, considered a constant of the contraction of the c$  $identified \ a \ key \ molecule \ for \ metabolic \ thermogenesis \ to \ avoid \ an \ excess \ of \ fat \ accumulation. \ UCP-1 \ expression \ is \ accumulation.$ usually restricted to brown adipose when induced by cold exposure and thyroid hormone.

Storage

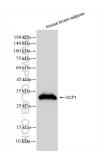
Storage:

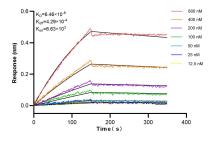
Store at -20°C. Stable for one year after shipment.

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

## Selected Validation Data





mouse brown adipose tissue were subjected to SDS PAGE followed by western blot with 83870-1-RR (UCP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.

Biolayer interferometry (BLI) kinetic assays of 83870-1-RR against Human UCP1 were performed. The affinity constant is 64.6 nM.