For Research Use Only

UCP1 Recombinant antibody, PBS Only

Catalog Number:83870-1-PBS



Purification Method:

Protein A purfication

CloneNo.: 240782F3

Basic Information

Catalog Number: 83870-1-PBS

BC098168 GeneID (NCBI): Concentration: 1 mg/ml 7350 Source: **UNIPROT ID:** Rabbit P25874

Isotype: Full Name: uncoupling protein 1 (mitochondrial,

proton carrier) Immunogen Catalog Number: AG20388 Calculated MW:

307 aa, 33 kDa Observed MW: 33 kDa

GenBank Accession Number:

Applications

Tested Applications: WB, IHC, IF-P, ELISA Species Specificity: human, mouse

Background Information

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

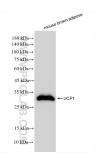
Storage

Storage: Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer: PBS Only

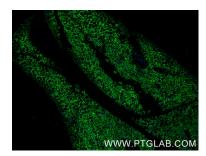
Selected Validation Data



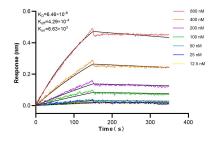
mouse brown adipose tissue were subjected to SDS PAGE followed by western blot with 83870-1-RR (UCP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83870-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded rat brain tissue slide using 83870-1-RR (UCP1 antibody) at dilution of 1:400 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83870-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brown adipose tissue using UCP1 antibody (83870-1-RR, Clone: 240782F3) at dilution of 1:400 and Coralite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 83870-1-PBS in a different storage buffer formulation.



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