

For Research Use Only

UCP1 Recombinant antibody

Catalog Number: 83870-1-RR



Basic Information

Catalog Number:	83870-1-RR	GenBank Accession Number:	BC098168	Purification Method:	Protein A purification
Concentration:	1000 ug/ml	GeneID (NCBI):	7350	CloneNo.:	240782F3
Source:	Rabbit	UNIPROT ID:	P25874	Recommended Dilutions:	WB 1:5000-1:50000
Isotype:	IgG	Full Name:	uncoupling protein 1 (mitochondrial, proton carrier)	IHC 1:200-1:800	IF-P 1:200-1:800
Immunogen Catalog Number:	AG20388	Calculated MW:	307 aa, 33 kDa		
		Observed MW:	33 kDa		

Applications

Tested Applications:	WB, IHC, IF-P, ELISA	Positive Controls:	
Species Specificity:	human, mouse	WB :	mouse brown adipose tissue,
		IHC :	rat brain tissue,
		IF-P :	mouse brown adipose tissue,
Note-IHC: suggested antigen retrieval with TE buffer pH 9.0; (*) Alternatively, antigen retrieval may be performed with citrate buffer pH 6.0			

Background Information

UCP-1 (Mitochondrial uncoupling protein 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 -20°C. Stable for one year after shipment.
Storage Buffer:
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.
Aliquoting is unnecessary for -20°C storage

For technical support and original validation data for this product please contact:

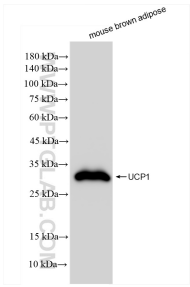
T: 4006900926

E: Proteintech-CN@ptglab.com

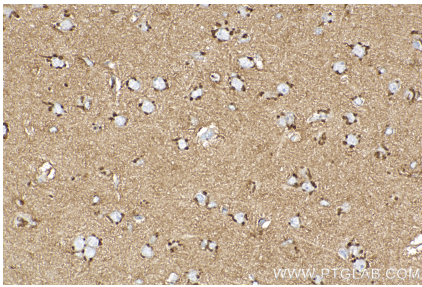
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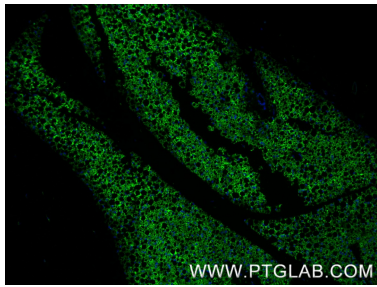
Selected Validation Data



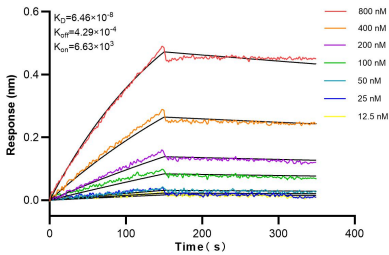
mouse brown adipose tissue were subjected to SDS PAGE followed by western blot with 83870-1-RR (UCP1 antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours.



Immunohistochemical analysis of paraffin-embedded 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).



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).



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