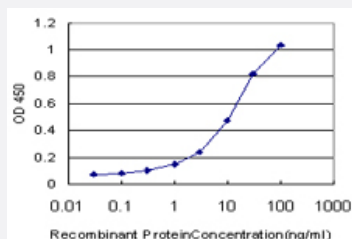


UCP1 monoclonal antibody (M01), clone 4E5

Catalog # H00007350-M01

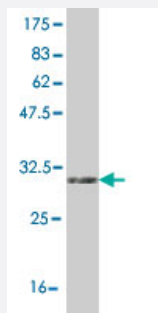
Size 100 ug

Applications



Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged UCP1 is approximately 0.3ng/ml as a capture antibody.



Western Blot detection against Immunogen (29.7 KDa) .

Specification

Product Description	Mouse monoclonal antibody raised against a partial recombinant UCP1.
Immunogen	UCP1 (NP_068605, 232 a.a. ~ 267 a.a) partial recombinant protein with GST tag. MW of the GST tag alone is 26 KDa.
Sequence	PVDVVKTRFINSPPGQYKSVPCAMKVFTNEGPTAF
Host	Mouse
Reactivity	Human
Interspecies Antigen Sequence	Mouse (81); Rat (78)

Isotype	IgG2a Kappa
Quality Control Testing	Antibody Reactive Against Recombinant Protein. Western Blot detection against Immunogen (29.7 KDa) .
Storage Buffer	In 1x PBS, pH 7.4
Storage Instruction	Store at -20°C or lower. Aliquot to avoid repeated freezing and thawing.

Applications

- Western Blot (Recombinant protein)

[Protocol Download](#)

- Sandwich ELISA (Recombinant protein)

Detection limit for recombinant GST tagged UCP1 is approximately 0.3ng/ml as a capture antibody.

[Protocol Download](#)

- ELISA

Gene Info — UCP1

Entrez GeneID	7350
GeneBank Accession#	NM_021833
Protein Accession#	NP_068605
Gene Name	UCP1
Gene Alias	SLC25A7, UCP
Gene Description	uncoupling protein 1 (mitochondrial, proton carrier)
Omim ID	113730 601665
Gene Ontology	Hyperlink

Gene Summary

Mitochondrial uncoupling proteins (UCP) are members of the 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 only in brown adipose tissue, a specialized tissue which functions to produce heat. [provided by RefSeq]

Other Designations

mitochondrial brown fat uncoupling protein|thermogenin|uncoupling protein 1

Pathway

- [PPAR signaling pathway](#)

Disease

- [Albuminuria](#)
- [Anorexia Nervosa](#)
- [Atherosclerosis](#)
- [Birth Weight](#)
- [Body Weight](#)
- [Bulimia](#)
- [Calcinosis](#)
- [Cardiovascular Diseases](#)
- [Coronary Artery Disease](#)
- [Diabetes Mellitus](#)
- [Diabetic Nephropathies](#)
- [Diabetic Neuropathies](#)
- [Diabetic Retinopathy](#)
- [Disease Progression](#)
- [Dyslipidemias](#)

- [Edema](#)
- [Fatty Liver](#)
- [Genetic Predisposition to Disease](#)
- [Glomerulonephritis](#)
- [Glucose Intolerance](#)
- [Hearing Disorders](#)
- [Hepatitis](#)
- [Hypercholesterolemia](#)
- [Hypertension](#)
- [Insulin Resistance](#)
- [Kidney Failure](#)
- [Metabolic Syndrome X](#)
- [Obesity](#)
- [Ovarian Failure](#)
- [Polycystic Ovary Syndrome](#)
- [Puberty](#)
- [Sudden Infant Death](#)
- [Thrombophilia](#)
- [Thyroid Neoplasms](#)
- [Tobacco Use Disorder](#)
- [Weight Gain](#)
- [Weight Loss](#)