SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

[Primary Antibody]

Rabbit Anti-MCT 8 antibody

Catalog Number: SL11434R

FOR RESEARCH USE ONLY

[DATASHEET]

Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Target:	MCT 8
Immunogen:	KLH conjugated synthetic peptide derived from human MOT8/SLC16A2: 101-200/539 <Extracellular>
Purification:	affinity purified by Protein A
Concentration:	1mg/ml
Storage:	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol. Shipped at 4℃. Store at -20 °C for one year. Avoid repeated freeze/thaw cycles.
Applications:	WB=1:500-2000 not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Reactivity:	Human, Mouse, Rat, (predicted: Rabbit)
Predicted MW.:	59kDa
Subcellular Location:	The cell membrane
Background:	This gene encodes an integral membrane protein that functions as a transporter of thyroid hormone. The encoded protein facilitates the cellular importation of thyroxine (T4), triiodothyronine (T3), reverse triiodothyronine (rT3) and diidothyronine (T2). This gene is expressed in many tissues and likely plays an important role in the development of the central nervous system. Loss of function mutations in this gene are associated with psychomotor retardation in males while females exhibit no neurological defects and more moderate thyroid-deficient phenotypes. This gene is subject to X-chromosome inactivation. Mutations in this gene are the cause of Allan-Herndon-Dudley syndrome. [provided by RefSeq, Mar 2012] **Function:** Very active and specific thyroid hormone transporter. Stimulates cellular uptake of thyroxine (T4), triiodothyronine (T3), reverse triiodothyronine (rT3) and diidothyronine. Does not transport Leu, Phe, Trp or Tyr.

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

SunLong Biotech Co.,LTD
Tel: 0086-571-56623320 Fax:0086-571-56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

	Subunit: Homodimer. **Subcellular Location:** Cell membrane; Multi-pass membrane protein **Tissue Specificity:** Highly expressed in liver and heart. DISEASE: Defects in SLC16A2 are the cause of monocarboxylate transporter 8 deficiency (MCT8 deficiency) [MIM:300523]; also known as Allan-Herndon-Dudley syndrome (AHDS). MCT8 deficiency consists of a severe form of X-linked psychomotor retardation combined with abnormal thyroid hormone (TH) levels. Thyroid hormone deficiency can be caused by defects of hormone synthesis and action, but it has also been linked to a defect in cellular hormone transport. Affected patients are males with abnormal relative concentrations of three circulating iodothyronines, as well as severe neurological abnormalities, including global developmental delay, central hypotonia, spastic quadriplegia, dystonic movements, rotary nystagmus, and impaired gaze and hearing. Heterozygous females had a milder thyroid phenotype and no neurological defects. **Similarity:** Belongs to the major facilitator superfamily. Monocarboxylate porter (TC 2.A.1.13) family. **Database links:** **Entrez Gene:** 6567 Human Omim: 300095 Human **SwissProt:** P36021 Human **Unigene:** 75317 Human

[VALIDATION IMAGES]

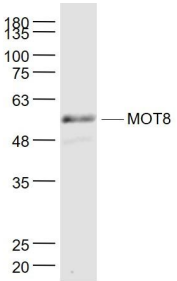


Figure 1. Sample: Heart (Mouse) Lysate at 40 ug Primary: Anti- MOT8 (SL11434R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 59 kD Observed band size: 53 kD

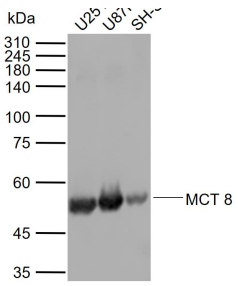


Figure 2. Sample: Lane 1: Human U251 cell lysates Lane 2: Human U87MG cell lysates Lane 3: Human SH-SY5Y cell lysates Primary: Anti-MCT 8 (SL11434R) at 1/1000 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 59 kDa Observed band size: 53 kDa

Important Note: This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.