

Datasheet for 600-401-FD9**THEM2 Antibody****Overview**

Description:	Anti-THEM2 (RABBIT) Antibody - 600-401-FD9
Item No.:	600-401-FD9
Size:	100 µg
Applications:	ELISA, IF, IHC, WB
Reactivity:	Human, Mouse, Rat
Host Species:	Rabbit

Product Details

Background:	THEM2, also known as ACOT13, belongs to the hotdog-fold superfamily and possesses thioesterase activity, with greater activity observed with longer chain acyl-CoAs such as myristoyl- and palmitoyl-CoA. THEM2 is highly expressed in several tissues such as heart, kidney, liver and brain and has been shown to be co-localized with beta-tubulin on microtubules. THEM2 interacts with StarD, a protein that plays a key role in fatty acid metabolism, and the addition of StarD to THEM2 increased its catalytic activity, suggesting that THEM2 plays a significant role in the metabolism of fatty acids. At least two isoforms of THEM2 are known to exist.
Synonyms:	THEM2 Antibody, HT012, THEM2, PNAS-27, HT012, Acyl-coenzyme A thioesterase 13, Thioesterase superfamily member 2, Acyl-CoA thioesterase 13
Host Species:	Rabbit
Clonality:	Polyclonal
Format:	IgG

Target Details

Gene Name:	ACOT13
Reactivity:	Human, Mouse, Rat
Immunogen Type:	Conjugated Peptide
Immunogen:	Anti-THEM2 antibody was prepared from whole rabbit serum produced by repeated immunizations with a 17 amino acid synthetic peptide near the C-terminus of human THEM2.

Purity/Specificity: Anti-THEM2 Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. Cross reactivity with THEM2 from other sources has not been determined.

Relevant Links:

- [UniProtKB - Q9NPJ3](#)
- [GeneID - 55856](#)
- [NCBI - NP_001153566.1](#)

Application Details

Tested Applications: ELISA, IF, IHC, WB

Application Note: Anti-THEM2 Antibody has been tested for use in ELISA, Western Blotting, Immunohistochemistry and Immunofluorescence. Specific conditions for reactivity should be optimized by the end user. Expect a band at approximately 15 kDa in Western Blots of specific cell lysates and tissues.

Assay Dilutions: All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.

ELISA: 1:10,000

IF: 20 µg/mL

IHC: 2.5 µg/mL

WB: 1 µg/mL

Formulation

Physical State: Liquid (sterile filtered)

Concentration: 1 mg/mL by UV absorbance at 280 nm

Buffer: 0.01 M Sodium Phosphate, 0.25 M Sodium Chloride, pH 7.2

Preservative: 0.02% (w/v) Sodium Azide

Stabilizer: None

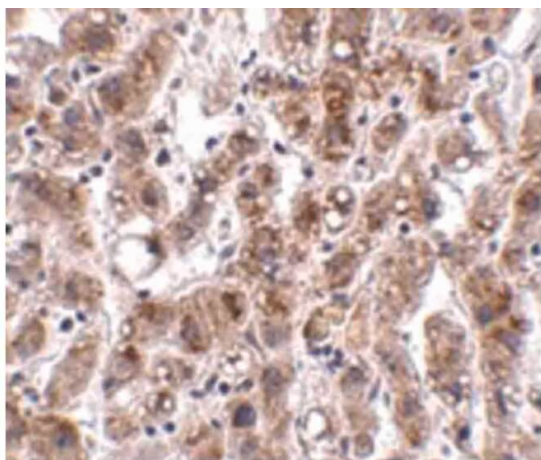
Shipping & Handling

Shipping Condition: Dry Ice

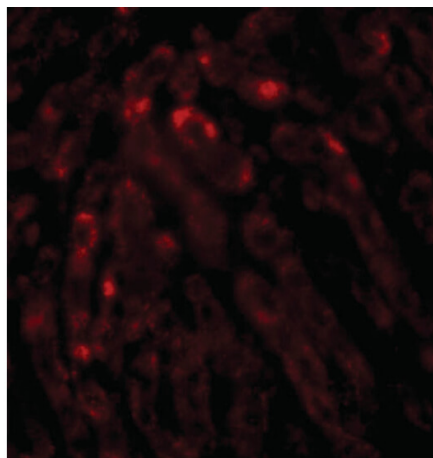
Storage Condition: Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

Expiration:

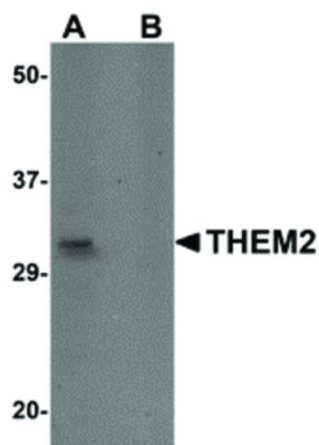
Expiration date is one (1) year from date of receipt.

Images**Immunohistochemistry**

Immunohistochemistry of THEM2 antibody. Tissue: Human liver tissue. Fixation: formalin fixed paraffin embedded. Antigen retrieval: not required. Primary antibody: THEM2 antibody at 2.5 µg/mL for 1 h at RT. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: THEM2 is secreted into the extracellular space. Staining: THEM2 as precipitated brown signal with blue nuclear counterstain.

**Immunofluorescence Microscopy**

Immunofluorescence Microscopy of THEM2 antibody. Tissue: human liver tissue. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: THEM2 antibody at 20 µg/mL for 1 h at RT. Secondary antibody: Fluorescein rabbit secondary antibody at 1:10,000 for 45 min at RT. Localization: THEM2 is secreted into the extracellular space. Staining: THEM2 as red fluorescent signal.

**Western Blot**

Western Blot of THEM2 antibody. Lane 1: HepG2 cell lysate with THEM2 antibody at 1 $\mu\text{g/mL}$ in the absence of blocking peptide. Lane 2: HepG2 cell lysate with THEM2 antibody at 1 $\mu\text{g/mL}$ in the presence of blocking peptide. Load: 35 μg per lane. Secondary antibody: Peroxidase rabbit secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 15 kDa, 30 kDa for THEM2. Other band(s): THEM2 splice variants and isoforms.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.