

#42713 Store at -20C

## THEM2 Antibody

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Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB, IP	H M R Mk	Endogenous	15	Rabbit	#Q9NPJ3	55856

## Product Usage Information

## Application

Western Blotting

## Dilution

1:1000

Immunoprecipitation

1:50

## Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at –20°C. Do not aliquot the antibody.

## Specificity / Sensitivity

THEM2 Antibody recognizes endogenous levels of total THEM2 protein.

## Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the carboxy terminus of human THEM2 protein. Antibodies are purified by protein A and peptide affinity chromatography.

## Background

THEM2 is a homotetrameric fatty acyl-CoA thioesterase (1). THEM2 and PC-TP (phosphatidylcholine transfer protein), both enriched in liver, interact to form a complex (1). Cell membrane-bound phosphatidylcholines bind to PC-TP in the complex (1). The complex in turn inhibits IRS-2 and mTORC1, which leads to the suppression of insulin signaling (1). THEM2 has also been shown to regulate adaptive thermogenesis in mice (2).

## Background References

1. Ersoy, B.A. et al. (2013) *Sci Signal* 6, ra64.
2. Kang, H.W. et al. (2013) *J Biol Chem* 288, 33376-86.

## Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

## Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

## Applications Key

**WB:** Western Blotting **IP:** Immunoprecipitation

## Cross-Reactivity Key

**H:** human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster  
**X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse  
**GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

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