

**THEM2 Antibody**

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**For Research Use Only. Not for Use in Diagnostic Procedures.**

<b>Applications:</b> W, IP	<b>Reactivity:</b> H M R Mk	<b>Sensitivity:</b> Endogenous	<b>MW (kDa):</b> 15	<b>Source/Isotype:</b> Rabbit	<b>UniProt ID:</b> #Q9NPJ3	<b>Entrez-Gene Id:</b> 55856
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<b>Product Usage Information</b>	<b>Application</b> Western Blotting Immunoprecipitation	<b>Dilution</b> 1:1000 1:50
<b>Storage</b>	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.	
<b>Specificity/Sensitivity</b>	THEM2 Antibody recognizes endogenous levels of total THEM2 protein.	
<b>Source / Purification</b>	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.	
<b>Background</b>	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).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Ersoy, B.A. et al. (2013) <i>Sci Signal</i> 6, ra64.</li> <li>2. Kang, H.W. et al. (2013) <i>J Biol Chem</i> 288, 33376-86.</li> </ol>	
<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).	
<b>Western Blot Buffer</b>	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.	
<b>Applications Key</b>	<b>W:</b> Western Blotting <b>IP:</b> Immunoprecipitation	
<b>Cross-Reactivity Key</b>	<b>H:</b> Human <b>M:</b> Mouse <b>R:</b> Rat <b>Mk:</b> Monkey	
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