

Product datasheet for **TA306801**

THEM4 Rabbit Polyclonal Antibody

Product data:

Product Type:	Primary Antibodies
Applications:	IF, IHC, WB
Recommended Dilution:	WB: 1 - 2 ug/mL, ICC: 2.5 ug/mL, IF: 20 ug/mL
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Isotype:	IgG
Clonality:	Polyclonal
Immunogen:	THEM4 antibody was raised against an 18 amino acid peptide near the center of human THEM4.
Formulation:	PBS containing 0.02% sodium azide.
Concentration:	1ug/ul
Purification:	Affinity chromatography purified via peptide column
Conjugation:	Unconjugated
Storage:	Store at -20°C as received.
Stability:	Stable for 12 months from date of receipt.
Gene Name:	thioesterase superfamily member 4
Database Link:	NP_444283 Entrez Gene 75778 Mouse Entrez Gene 361992 Rat Entrez Gene 117145 Human Q5T1C6



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Background:

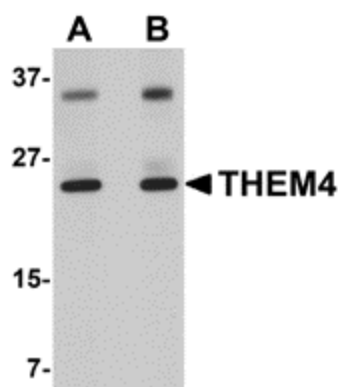
THEM4, also known as CTMP, binds specifically to the carboxy-terminal regulatory domain of PKB/Akt at the plasma membrane and acts as a negative regulator, reversing the phenotype of v-Akt-transformed cells. Hypermethylation of the THEM4 promoter and transcriptional downregulation of the gene has been reported in multiple glioblastomas, suggesting that epigenetic regulation of THEM4 may play a role in the progression of this cancer. Bioinformatic analysis, confirmed by in vitro testing, indicates that THEM4 is a broad-range, high activity acyl-CoA thioesterase. Recent reports have also indicated that TMEM4 is a mitochondrial protein whose overexpression is associated with an increase in mitochondrial membrane depolarization and caspase-3 and PARP cleavage, suggesting that THEM4 is involved in the apoptotic program. The additional higher molecular weight bands seen in the immunoblot may represent post-translationally modified TMEM4.

Synonyms:

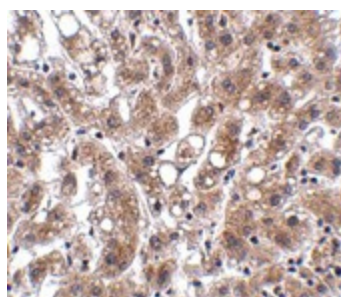
CTMP

Protein Families:

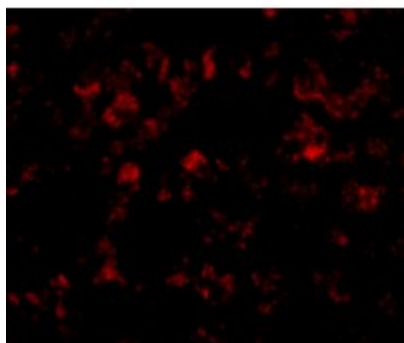
Druggable Genome

Product images:

Western blot analysis of THEM4 in human liver tissue lysate with THEM4 antibody at (A) 1 and (B) 2 ug/ml.



Immunohistochemistry of THEM4 in human liver tissue with THEM4 antibody at 2.5 ug/ml.



Immunofluorescence of THEM4 in human liver tissue with THEM4 antibody at 20 ug/mL.