

Datasheet for ABIN500905  
**anti-THEM4 antibody (Center)**[Go to Product page](#)

## 2 Images

## Overview

Quantity:	0.1 mg
Target:	THEM4
Binding Specificity:	Center
Reactivity:	Human, Mouse, Rat
Host:	Rabbit
Clonality:	Polyclonal
Conjugate:	This THEM4 antibody is un-conjugated
Application:	Western Blotting (WB), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Enzyme Immunoassay (EIA)

## Product Details

Immunogen:	THEM4 antibody was raised against an 18 amino acid peptide near the center of human THEM4.
Isotype:	IgG
Specificity:	This antibody detects THEM4 / CTMP.
Cross-Reactivity (Details):	Species reactivity (tested): Human, mouse, rat
Purification:	Peptide affinity chromatography

## Target Details

Target:	THEM4
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## Target Details

Alternative Name:	THEM4 / CTMP ( <a href="#">THEM4 Products</a> )
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: Carboxyl-terminal modulator protein, Thioesterase superfamily member 4
Gene ID:	117145
NCBI Accession:	<a href="#">NP_444283</a>
Pathways:	<a href="#">Fc-epsilon Receptor Signaling Pathway</a> , <a href="#">EGFR Signaling Pathway</a> , <a href="#">Neurotrophin Signaling Pathway</a>

## Application Details

Application Notes:	ELISA. Western blot: 1 - 2 µg/mL. Immunohistochemistry on paraffin sections. Other applications not tested. Optimal dilutions are dependent on conditions and should be determined by the user.
Restrictions:	For Research Use only

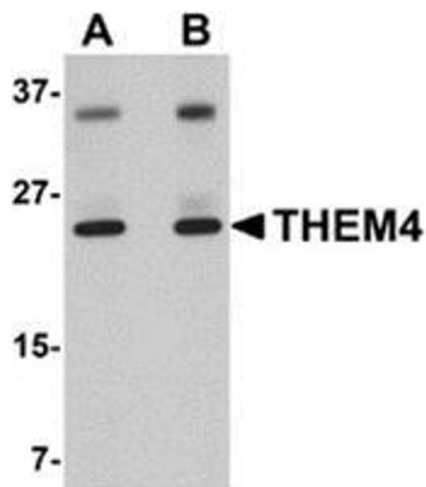
## Handling

Buffer:	PBS containing 0.02 % sodium azide
Preservative:	Sodium azide
Precaution of Use:	This product contains sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	Avoid repeated freezing and thawing.
Storage:	4 °C/-20 °C

## Handling

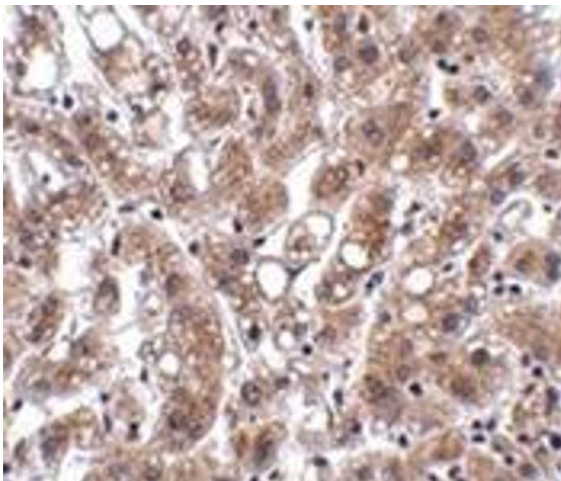
Storage Comment: Store at 2 - 8 °C for up to one month or (in aliquots) at -20 °C for longer.

## Images



### Western Blotting

**Image 1.** Western blot analysis of THEM4 in human liver tissue lysate with this product at (A) 1 and (B) 2 µg/ml.



### Immunohistochemistry (Paraffin-embedded Sections)

**Image 2.** Immunohistochemistry of THEM4 in human liver tissue with this product at 2.5 µg/ml.