

# THEMIS Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP54827

# Specification

# **THEMIS Polyclonal Antibody - Product Information**

Application Primary Accession Reactivity Host Clonality Calculated MW Physical State Immunogen	WB, IHC-P, IHC-F, IF, ICC, E <u>O8N1K5</u> Rat, Pig, Dog Rabbit Polyclonal 73 KDa Liquid KLH conjugated synthetic peptide derived from Human THEMIS
Epitope Specificity	301-400/641
Isotype	IgG
Purity affinity purified by Protein A	
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Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Nucleus.
SIMILARITY	Belongs to the themis family.
Post-translational modifications	Phosphorylated on Tyr residues quickly after TCR stimulation.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.

# **Background Descriptions**

Themis is a 641 amino acid nuclear and cytoplasmic protein that exists as three alternatively spliced isoforms. Themis belongs to the themis family and interacts with PLC  $\gamma$ 1, Emt and GRB2. Acting through T-cell antigen receptor (TCR) signaling and through the regulation of calcium influx and phosphorylation of ERK 1, Themis plays a central role in late thymocyte development by controlling both positive and negative T-cell selection. Themis is phosphorylated on Tyr residues quickly after TCR stimulation. The gene that encodes Themis maps to human chromosome 6q22.33. With 170 million base pairs, chromosome 6 comprises nearly 6% of the human genome. Deletion of a portion of the q arm of chromosome 6 is associated with early onset intestinal cancer, suggesting the presence of a cancer susceptibility locus. Additionally, Porphyria cutanea tarda, Parkinson's disease, Stickler syndrome and a susceptibility to bipolar disorder are all associated with genes that map to chromosome 6.

# **THEMIS Polyclonal Antibody - Additional Information**

Gene ID 387357

#### **Other Names** Protein THEMIS, Thymocyte-expressed molecule involved in selection, THEMIS, C6orf190, C6orf207



# Dilution

<span class ="dilution\_WB">WB~~1:1000</span><br \><span class ="dilution\_IHC-P">IHC-P~~N/A</span><br \><span class ="dilution\_IHC-F">IHC-F~~N/A</span><br \><span class ="dilution\_IF">IF~~1:50~200</span><br \><span class ="dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_ICC">ICC~~N/A</span><br \><span class = "dilution\_ICC">ICC~~N/A</sp

Format 0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

# **THEMIS Polyclonal Antibody - Protein Information**

Name THEMIS

Synonyms C6orf190, C6orf207

Function

Plays a central role in late thymocyte development by controlling both positive and negative T-cell selection. Required to sustain and/or integrate signals required for proper lineage commitment and maturation of T-cells. Regulates T-cell development through T-cell antigen receptor (TCR) signaling and in particular through the regulation of calcium influx and phosphorylation of Erk.

Cellular Location Cytoplasm {ECO:0000250|UniProtKB:Q8BGW0}. Nucleus {ECO:0000250|UniProtKB:Q8BGW0}

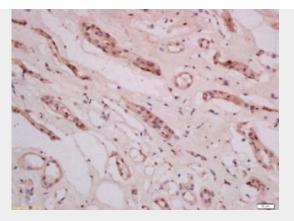
# **THEMIS Polyclonal Antibody - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

THEMIS Polyclonal Antibody - Images

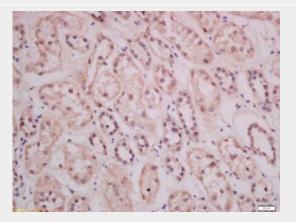




Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at  $37^{\circ}$ C for 20 min;

Incubation: Anti-THEMIS Polyclonal Antibody, Unconjugated(bs-12329R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining

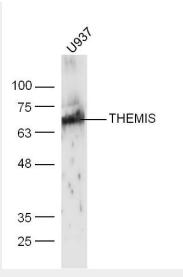


Tissue/cell: human kidney tissue; 4% Paraformaldehyde-fixed and paraffin-embedded;

Antigen retrieval: citrate buffer ( 0.01M, pH 6.0 ), Boiling bathing for 15min; Block endogenous peroxidase by 3% Hydrogen peroxide for 30min; Blocking buffer (normal goat serum,C-0005) at 37°C for 20 min;

Incubation: Anti-THEMIS Polyclonal Antibody, Unconjugated(bs-12329R) 1:200, overnight at 4°C, followed by conjugation to the secondary antibody(SP-0023) and DAB(C-0010) staining





# Sample:

U937 Cell (Human) Lysate at 30 ug Primary: Anti-THEMIS (bs-12329R) at 1/300 dilution Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution Predicted band size: 73 kD Observed band size: 73 kD