10320 Camino Santa Fe, Suite G
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Tel: 858.875.1900 Fax: 858.875.1999

Anti-Themis (N-terminal region) Antibody
Catalog # AN1987

Specification

Anti-Themis (N-terminal region) Antibody - Product Information

Primary Accession	Q8N1K5
Reactivity	**Bovine**
Host	**Rabbit**
Clonality	**Rabbit Polyclonal**
Isotype	**IgG**
Calculated MW	**73452**

Anti-Themis (N-terminal region) Antibody - Additional Information

Gene ID	**387357**

Other Names
Gasp, SPoT, TSEPA, thylex

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
Anti-Themis (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Shipping
Blue Ice

Anti-Themis (N-terminal region) Antibody - Protocols

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

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

Anti-Themis (N-terminal region) Antibody - Images

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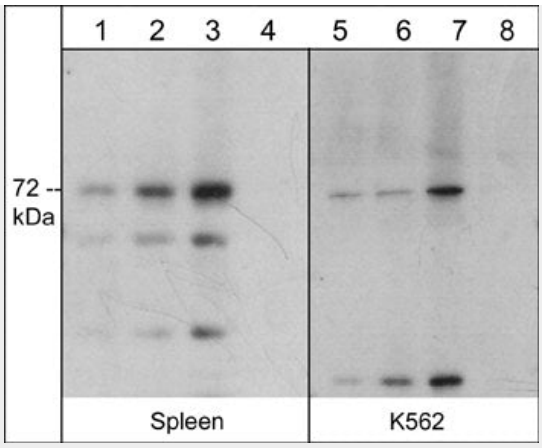

Western blot of mouse spleen (lanes 1-4) and human K562 cells (lanes 5-8). The blots were probed with anti-themis (N-terminal region) rabbit polyclonal antibody at 1:2000 (lanes 1 & 5), 1:1000 (lanes 2 & 6), 1:500 (lanes 3 & 7), or 1:500 in the presence of themis blocking peptide (TX3885) (lanes 4 & 8).

Anti-Themis (N-terminal region) Antibody - Background

During positive selection, thymocytes transition through a stage during which T cell antigen receptor (TCR) signaling controls CD4-versus-CD8 lineage selection and maturation. Thymocyte-expressed molecule involved in selection (themis) is critically required for this thymocyte selection. Themis has been identified as several molecules: Grb2-associating protein (GASP), signaling phosphoprotein specific for T cells (SPoT), TSEPA, and thylex. Themis is a cytosolic protein with no known functional motifs. Its expression is observed primarily in T cells, especially immature CD4/CD8 double positive thymocytes. Themis-deficient thymocytes have defective positive selection, and fewer numbers of mature thymocytes. These themis-induced effects may be due to defective TCR signaling since themis constitutively associates with the TCR adaptor Grb2, and themis is phosphorylated quickly after TCR stimulation. In addition, themis is required for optimal TCR-driven calcium mobilization and activation of the MAP kinase Erk. Thus, themis may be an important adaptor protein in TCR signaling.