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Anti-Themis (N-terminal region) Antibody

Catalog # AN1987

Product Information

Application	WB
Primary Accession	Q8N1K5
Host	Rabbit
Clonality	Rabbit Polyclonal
Isotype	IgG
Calculated MW	73452

Additional Information

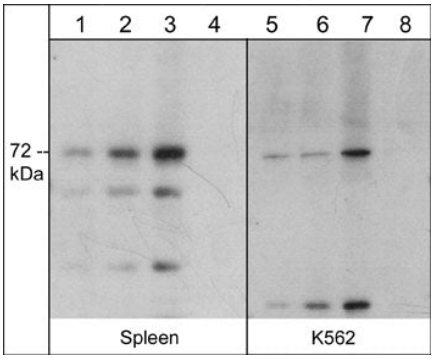
Gene ID	387357
Other Names	Gasp, SPoT, TSEPA, thylex
Dilution	WB~~1:1000
Storage	Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	Anti-Themis (N-terminal region) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.
Shipping	Blue Ice

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.

Images

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).