

Revision 1

Store at
-20C
#14108

GIMAP5 Antibody



Orders: 877-616-CELL (2355)
orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com
cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
W, IP	H	Endogenous	30,32	Rabbit	#Q96F15	55340

Product Usage Information

Application

Western Blotting
Immunoprecipitation

Dilution

1:1000
1:50

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA and 50% glycerol. Store at -20°C. Do not aliquot the antibody.

Specificity/Sensitivity

GIMAP5 Antibody recognizes endogenous levels of total GIMAP5 protein. This antibody also recognizes proteins of unknown origin at 12 kDa and 50 kDa.

Source / Purification

Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues near the amino terminus of human GIMAP5 protein. Antibodies are purified by protein A and peptide affinity chromatography.

Background

GTPase immune-associated proteins (GIMAP), also known as immune-associated nucleotide-binding (IAN) proteins, are evolutionarily conserved GTP-binding proteins involved in lymphocyte development, inflammation, and autoimmune diseases (reviewed in 1,2). Human GTPase IMAP family member 5 (GIMAP5, hIan5) is the homolog of the rat Ian4 protein that is mutated in severe cases of T-cell lymphopenia and insulin-dependent diabetes in Biobreeding diabetes-prone (BB-DP) rats (3,4). GIMAP5 protein is preferentially expressed in CD4- and CD8-positive T-cells as well as B-cell lymphomas (4). Research studies using GIMAP5-deficient mice show that GIMAP5 protein is critical for survival of peripheral T-cells, hematopoietic stem cells, and progenitor cells (5-7). Additional studies indicate that GIMAP5 deficiency leads to a loss of immunological tolerance (8). Polymorphisms in the human *GIMAP5* gene are associated with systemic lupus erythematosus and type I diabetes (9-11). Potential mechanisms for GIMAP5 control of cell survival include regulation of Bcl-2 family proteins, mitochondrial integrity, lysosomal function, and calcium regulation (5,7, 11-14).

Background References

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Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

W: Western Blotting **IP:** Immunoprecipitation

Cross-Reactivity Key

H: Human

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