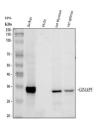


GIMAP5 Antibody / GTPase IMAP family member 5 (FY12100)

Catalog No.	Formulation	Size
FY12100	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q96F15
Applications	Western Blot : 0.25-0.5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This GIMAP5 antibody is available for research use only.



Western blot analysis of GIMAP5 using anti-GIMAP5 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human THP-1 whole cell lysates, Lane 2: human Jurkat whole cell lysates, Lane 3: human HEL whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-GIMAP5 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit lgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. A specific band was detected for GIMAP5 at approximately 35 kDa. The expected band size for GIMAP5 is at 35 kDa.

Description

GIMAP5 antibody detects GTPase IMAP family member 5, encoded by the GIMAP5 gene. GTPase IMAP family member 5 is a small GTP-binding protein involved in lymphocyte survival, immune regulation, and autoimmunity. GIMAP5 antibody provides researchers with a specific reagent for studying T cell homeostasis, immune tolerance, and lymphocyte biology.

GTPase IMAP family member 5 belongs to the GIMAP family of immune-associated GTPases. Research using GIMAP5 antibody has shown that it is expressed in T cells, natural killer cells, and other lymphoid lineages. It regulates mitochondrial integrity and apoptosis pathways, promoting lymphocyte survival during development and immune responses.

Studies with GIMAP5 antibody have revealed that mutations in GIMAP5 cause lymphopenia and autoimmunity in rat models. In humans, variants in GIMAP5 have been linked to systemic lupus erythematosus, type 1 diabetes, and other autoimmune disorders. These findings demonstrate the importance of GIMAP5 in maintaining immune tolerance and homeostasis.

Dysregulation of GTPase IMAP family member 5 has also been associated with altered T cell signaling and chronic inflammation. Research using GIMAP5 antibody has shown that deficiency impairs mitochondrial stability and increases susceptibility to apoptosis, leading to reduced T cell numbers and immune dysregulation.

GIMAP5 antibody is widely applied in flow cytometry, western blotting, and immunohistochemistry. Flow cytometry identifies lymphocyte subsets expressing GIMAP5, western blotting quantifies protein levels, and immunohistochemistry demonstrates tissue distribution in lymphoid organs. These applications make GIMAP5 antibody indispensable for immunology research.

By providing validated GIMAP5 antibody reagents, NSJ Bioreagents supports studies into T cell survival, autoimmune disease, and immune regulation. Detection of GTPase IMAP family member 5 provides researchers with insight into how immune-associated GTPases regulate lymphocyte biology and tolerance.

Application Notes

Optimal dilution of the GIMAP5 antibody should be determined by the researcher.

Immunogen

E.coli-derived human GIMAP5 recombinant protein (Position: M1-E240) was used as the immunogen for the GIMAP5 antibody.

Storage

After reconstitution, the GIMAP5 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.