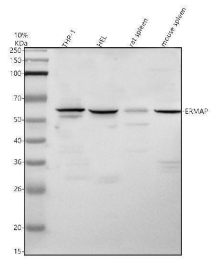
ERMAP Antibody / Erythroid membrane-associated protein Antibody (FY13611)

Catalog No.	Formulation	Size
FY13611	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

Species Reactivity	Human
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q96PL5
Applications	Western blot: 0.5-1ug/ml ELISA: 0.1-0.5 ug/ml
Limitations	This ERMAP Antibody / Erythroid membrane-associated protein Antibody is provided for laboratory research use only.



ERMAP Antibody by WB in human cells and rodent spleen. Western blot analysis using Erythroid membrane-associated protein Antibody detects a prominent band consistent with the expected molecular weight of approximately 53 kDa in human THP-1 (lane 1), HEL (lane 2), rat spleen (lane 3), and mouse spleen (lane 4) lysates. Reduced samples containing 30 ug total protein per lane were separated under reducing conditions by 10% SDS-PAGE and transferred to nitrocellulose. Following blocking with 5% nonfat milk, membranes were incubated with primary antibody at 0.5 ug/mL overnight at 4oC. Bound antibody was visualized with HRP-conjugated secondary antibody and chemiluminescent substrate.

Description

ERMAP Antibody / Erythroid membrane-associated protein Antibody recognizes ERMAP, a protein with important roles in cellular physiology. ERMAP encodes erythroid membrane-associated protein, a type I membrane glycoprotein expressed prominently during erythroid development. The protein contains an extracellular immunoglobulin-like domain and an intracellular region associated with signaling-related protein motifs. ERMAP is also the carrier of antigens belonging to the Scianna blood group system, giving it a recognized role in transfusion medicine.

Variation in the ERMAP gene can alter Scianna blood group antigens on the red blood cell surface. Although antibodies against these antigens are uncommon, their recognition can be relevant in blood group typing and investigations of alloimmune responses. This connection illustrates how a single membrane protein can be significant both for erythrocyte biology and for the antigenic diversity encountered during transfusion. Erythroid membrane-associated protein Antibody is a useful designation for this molecular target.

ERMAP has also been described as a member of the butyrophilin-related immunoglobulin superfamily. Its domain organization suggests potential involvement in cell-surface interactions, but the precise physiological signaling functions of ERMAP are not as well established as its identity as a blood group antigen carrier. Expression during erythroid maturation raises questions about how the protein contributes to membrane organization or communication between developing blood cells and their environment.

As erythroid precursors mature, their plasma membranes undergo extensive remodeling to support the specialized functions of circulating erythrocytes. ERMAP is one component of this changing surface proteome. Its study connects molecular genetics, erythroid differentiation, membrane-protein diversity, and the clinical significance of inherited blood group variation. NSJ Bioreagents provides ERMAP Antibody for research into the molecular biology of ERMAP. An ERMAP Antibody supports investigation of the biological processes associated with this protein.

Explore related research targets in our Immunology Antibodies collection.

Application Notes

The recommended approach is to establish the optimal working dilution of the ERMAP Antibody / Erythroid membrane-associated protein Antibody through preliminary testing.

Immunogen

The ERMAP Antibody was generated using e. coli-derived human ERMAP recombinant protein (amino acids T58-K213).

Storage

Store the reconstituted ERMAP Antibody at 4oC for up to one month. For long-term storage, divide into aliquots and keep at -20oC for up to six months. Avoid repeated freeze-thaw cycles.

Alternate Names

ERMAP antibody, Erythroid membrane-associated protein antibody, erythroblast membrane associated protein (Scianna blood group) antibody, hERMAP antibody, PRO2801 antibody, Radin blood group antigen antibody, RD antibody, SC antibody, Scianna blood group antigen antibody

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