

ERMAP (YS-6): sc-81790

BACKGROUND

ERMAP (erythroblast membrane-associated protein), also known as RD, SC or PRO2801, is a single-pass type one membrane protein that belongs to the immunoglobulin superfamily. Expressed in cord blood, fetal liver and adult bone marrow, ERMAP is thought to function as a cell adhesion molecule in erythroid cells and is responsible for expression of the Scianna/Radin (Sc/Rd) blood group antigen system. The Sc/Rd system is comprised of seven antigens that are present on the surface of red blood cells and have a variety of functions ranging from protein transport to cell adhesion. These seven blood antigens can differ in their expression within a population and may sometimes differ between mother and child. A fetus expressing different blood antigens than its mother may cause the mother to produce antibodies against the fetal blood. This condition is known as hemolytic disease of the newborn (HDN) and is characterized by jaundice, anemia and, in some cases, infant death.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: ERMAP (human) mapping to 1p34.2; Ermap (mouse) mapping to 4 D2.1.

SOURCE

ERMAP (YS-6) is a mouse monoclonal antibody raised against recombinant ERMAP of human origin.

PRODUCT

Each vial contains 100 µg IgG_{2a} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

ERMAP (YS-6) is recommended for detection of ERMAP of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for ERMAP siRNA (h): sc-88045, ERMAP siRNA (m): sc-144934, ERMAP shRNA Plasmid (h): sc-88045-SH, ERMAP shRNA Plasmid (m): sc-144934-SH, ERMAP shRNA (h) Lentiviral Particles: sc-88045-V and ERMAP shRNA (m) Lentiviral Particles: sc-144934-V.

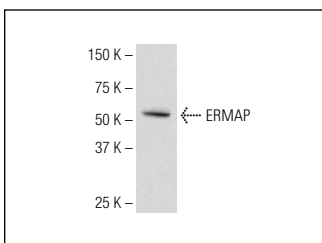
Molecular Weight of ERMAP: 53 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



ERMAP (YS-6): sc-81790. Western blot analysis of ERMAP expression in HeLa whole cell lysate.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.