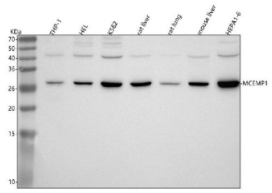
MCEMP1 Antibody / Mast cell-expressed membrane protein 1 (FY13113)

Catalog No.	Formulation	Size
FY13113	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, Mouse, Rat
Format	Lyophilized
Host	Rabbit
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	Q8IX19
Applications	0.25-0.5ug/ml0.1-0.5ug/ml
Limitations	This MCEMP1 antibody is available for research use only.



Western blot analysis of MCEMP1 using anti-MCEMP1 antibody. Lane 1: human THP-1 whole cell lysates, Lane 2: human HEL whole cell lysates, Lane 3: human K562 whole cell lysates, Lane 4: rat liver tissue lysates, Lane 5: rat lung tissue lysates, Lane 6: mouse liver tissue lysates, Lane 7: mouse Hepa1-6 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-MCEMP1 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 IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using enhanced chemiluminescent. MCEMP1 antibody detects a single band at ~28 kDa across the indicated samples. Although the calculated mass is ~21 kDa, MCEMP1 is a glycosylated, single-pass membrane protein that commonly migrates at ~27-30 kDa on SDS-PAGE.

Description

MCEMP1 antibody detects Mast cell-expressed membrane protein 1, a type I transmembrane protein implicated in immune cell activation and inflammatory signaling. The UniProt recommended name is Mast cell-expressed membrane

protein 1 (MCEMP1). This protein is predominantly expressed in mast cells, monocytes, and macrophages, where it may function as a receptor or co-stimulatory molecule regulating immune responses.

Functionally, MCEMP1 antibody identifies a 177-amino-acid membrane glycoprotein featuring a short extracellular region, a single transmembrane domain, and a cytoplasmic tail containing an immunoreceptor tyrosine-based activation motif (ITAM). Upon phosphorylation, MCEMP1 can recruit SYK kinase and other signaling molecules, promoting cytokine production and cell activation.

The MCEMP1 gene is located on chromosome 19q13.4 and is expressed primarily in immune cells of the myeloid lineage, including mast cells, basophils, and macrophages. MCEMP1 expression increases during inflammation, allergic responses, and infection, suggesting a role in innate immune activation. It may also contribute to cytokine cross-talk between immune cells and epithelial barriers.

Pathologically, aberrant MCEMP1 expression is associated with allergic inflammation, asthma, and sepsis. Its upregulation in immune cells correlates with hyperinflammatory states, making it a potential biomarker for inflammatory disorders. Research using MCEMP1 antibody helps clarify its role in immune activation and signaling mechanisms.

MCEMP1 antibody is validated for western blotting, immunohistochemistry, and flow cytometry to detect immune cell membrane proteins. NSJ Bioreagents provides MCEMP1 antibody reagents optimized for research in immunology, inflammation, and signal transduction.

Structurally, Mast cell-expressed membrane protein 1 contains a single-pass transmembrane segment and cytoplasmic ITAM motifs that drive downstream kinase signaling. This antibody aids in studies of MCEMP1's potential receptor functions and involvement in immune regulation.

Application Notes

Optimal dilution of the MCEMP1 antibody should be determined by the researcher.

Immunogen

E.coli-derived human MCEMP1 recombinant protein (Position: M1-Q183) was used as the immunogen for the MCEMP1 antibody.

Storage

After reconstitution, the MCEMP1 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.

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