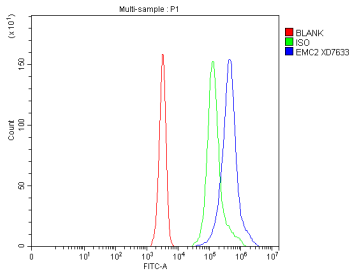
EMC2 Antibody / ER membrane protein complex subunit 2 Antibody (FY13664)

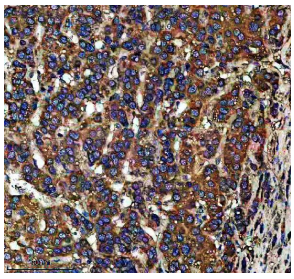
Catalog No.	Formulation	Size
FY13664	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

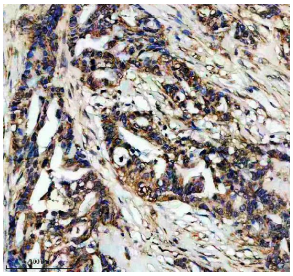
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q15006
Applications	Western blot: 0.5-1ug/ml Immunohistochemistry (FFPE): 2-5ug/ml Flow cytometry: 1-3ug/million cells ELISA: 0.1-0.5 ug/ml
Limitations	Intended solely for research purposes, this EMC2 Antibody / ER membrane protein complex subunit 2 Antibody is not for clinical use.



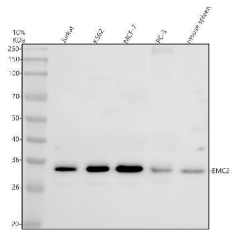
EMC2 Antibody by FCM in Fixed Jurkat Cells. Flow cytometry of fixed and permeabilized Jurkat cells using EMC2 Antibody shows the blue test histogram shifted to higher fluorescence than the green isotype control; the red histogram represents unstained cells. This is intracellular staining and does not establish surface labeling of live cells.



EMC2 Antibody by IHC in Human Liver Cancer Tissue. Immunohistochemistry of paraffin-embedded human liver cancer tissue using EMC2 Antibody shows prominent brown DAB immunoreactivity within tumor cell cytoplasm. Hematoxylin counterstaining highlights blue nuclei, and staining intensity varies across the tumor section.



EMC2 Antibody by IHC in Human Pancreatic Cancer Tissue. Immunohistochemistry of paraffin-embedded human pancreatic cancer tissue using EMC2 Antibody shows brown DAB staining in malignant epithelial cells arranged among stromal elements. Blue hematoxylin-stained nuclei are visible, while surrounding connective tissue shows relatively limited staining.



EMC2 Antibody by WB in Human Cell Lines and Mouse Spleen. Western blot analysis using EMC2 Antibody demonstrates a principal band near 32-34 kDa. Lanes 1-4 contain Jurkat, K562, MCF-7, and PC-3 human cell lysates, respectively, and lane 5 contains mouse spleen tissue lysate. Bands are more prominent in the first three lanes, while weaker signal is visible in PC-3 and mouse spleen. The observed migration is broadly consistent with the expected molecular weight of EMC2. The blot supports detection in the tested human and mouse samples, although band intensity should not be interpreted as a quantitative measure of expression without loading normalization.

Description

EMC2 Antibody / ER membrane protein complex subunit 2 Antibody targets EMC2, a soluble core component of the endoplasmic reticulum membrane protein complex (EMC). The EMC is a conserved multiprotein assembly that supports the biogenesis of selected membrane proteins. Insertion of transmembrane segments into the ER membrane is a demanding process because hydrophobic helices must be transferred from the aqueous environment into the lipid bilayer while preserving their correct orientation. The EMC contributes to this process for particular classes of membrane proteins, complementing other insertion and translocation pathways.

EMC2 forms part of the cytosolic structural framework of the complex and helps organize interactions among EMC subunits. Structural studies have revealed a membrane-embedded region involved in accommodating hydrophobic segments and a cytosolic region that contributes to complex architecture. The EMC has been implicated in the insertion of terminal transmembrane helices and the biogenesis of certain multipass membrane proteins. Not every membrane protein depends equally on this machinery; reliance on EMC can reflect features such as transmembrane helix hydrophobicity and topology. This substrate selectivity is a key aspect of its biological function.

Proper membrane protein biogenesis is essential for receptors, transporters, and enzymes whose activities depend on correct membrane integration. When insertion fails, proteins may misfold, become unstable, or be diverted into quality-control pathways. Disrupting EMC components can therefore have downstream effects on cellular signaling and membrane physiology even when the complex itself does not directly carry out those functions. NSJ Bioreagents offers this EMC2 Antibody to support research into EMC assembly and the molecular basis of selective ER membrane protein insertion. Understanding the structural role of EMC2 may help explain how the complex coordinates cytosolic substrate handling with events occurring inside the lipid bilayer.

Explore related research targets in our Cell Biology Antibodies collection.

Application Notes

Users should optimize the working dilution of the EMC2 Antibody / ER membrane protein complex subunit 2 Antibody for their specific experimental setup.

Immunogen

The EMC2 Antibody was generated using e. coli-derived human TTC35/EMC2 recombinant protein (amino acids M1-S297).

Storage

Following reconstitution, the EMC2 Antibody can be kept at 4oC for one month. Aliquot for extended storage at -20oC for up to six months, avoiding repeated freezing and thawing.

Alternate Names

EMC2 antibody, ER membrane protein complex subunit 2 antibody, KIAA0103 antibody, TPR repeat protein 35 antibody, EMC2 rabbit polyclonal antibody

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