Human/Mouse/Rat EMP/MAEA Antibody

Monoclonal Mouse IgG_1 Clone # 730340

Catalog Number: MAB7288

DESCRIPTION

Species Reactivity	Human/Mouse/Rat
Specificity	Detects human EMP/MAEA in direct ELISAs and Western blots.
Source	Monoclonal Mouse IgG_1 Clone # 730340
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	*E. coli*-derived recombinant human EMP/MAEA Met12-Ser66 Accession # Q7L5Y9
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 μm filtered solution in PBS.

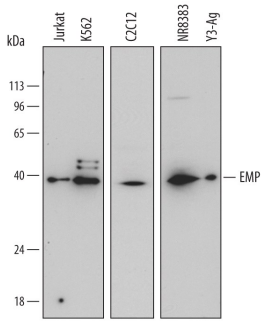
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Western Blot	0.5 µg/mL	See Below
Immunocytochemistry	8-25 µg/mL	See Below

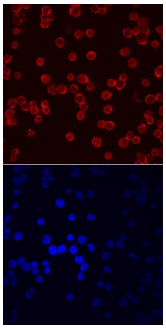
DATA

Western Blot



Detection of Human, Mouse, and Rat EMP/MAEA by Western Blot. Western blot shows lysates of Jurkat human acute T cell leukemia cell line, K562 human chronic myelogenous leukemia cell line, C2C12 mouse myoblast cell line, NR8383 rat alveolar macrophage cell line, and Y3-Ag rat myeloid cell line. PVDF membrane was probed with 0.5 µg/mL of Mouse Anti-Human/Mouse/Rat EMP/MAEA Monoclonal Antibody (Catalog # MAB7288) followed by HRP-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # HAF007). Specific bands were detected for EMP/MAEA at approximately 36-45 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Immunocytochemistry



EMP/MAEA in Jurkat Human Cell Line. EMP/MAEA was detected in immersion fixed Jurkat human acute T cell leukemia cell line using Mouse Anti-Human/Mouse/Rat EMP/MAEA Monoclonal Antibody (Catalog # MAB7288) at 10 µg/mL for 3 hours at room temperature. Cells were stained using the NorthernLights™ 557-conjugated Anti-Mouse IgG Secondary Antibody (red, upper panel; Catalog # NL007) and counterstained with DAPI (blue, lower panel). Specific staining was localized to cell surfaces and cytoplasm. View our protocol for Fluorescent ICC Staining of Cells on Coverslips. This application has not been tested in mouse or rat samples.

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

EMP (erythroblast macrophage protein), also called MAEA (macrophage-erythroblast attacher), is a 36-44 kDa membrane-associated protein in macrophages and erythroblasts within erythroblastic islands. EMP is essential to the process of nuclear extrusion in the transition of erythroblasts to reticulocytes. Within the region used as an immunogen, human EMP shares 98% amino acid (aa) sequence identity with mouse and rat EMP. Four potential isoforms of the canonical 396 aa form encode 360, 355, 328 and 245 aa, with insertions and deletions occurring after aa 150.