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MAEA Antibody (N-term)

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP17927a

Product Information

Application	WB, E
Primary Accession	Q7L5Y9
Other Accession	Q6GR10, Q5RKJ1, Q4VC33, Q4R9A8, Q7SXR3, Q5F398, Q3MHJ2, NP_001017405.1, NP_005873.2
Reactivity	Human
Predicted	Bovine, Chicken, Zebrafish, Monkey, Mouse, Rat, Xenopus
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB37712
Calculated MW	45287
Antigen Region	16-42

Additional Information

Gene ID	10296
Other Names	Macrophage erythroblast attacher, Cell proliferation-inducing gene 5 protein, Erythroblast macrophage protein, Human lung cancer oncogene 10 protein, HLC-10, MAEA, EMP
Target/Specificity	This MAEA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 16-42 amino acids from the N-terminal region of human MAEA.
Dilution	WB~~1:1000 E~~Use at an assay dependent concentration.
Format	Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.
Storage	Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.
Precautions	MAEA Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	MAEA

Function	Core component of the CTLH E3 ubiquitin-protein ligase complex that selectively accepts ubiquitin from UBE2H and mediates ubiquitination and subsequent proteasomal degradation of the transcription factor HBP1. MAEA and RMND5A are both required for catalytic activity of the CTLH E3 ubiquitin-protein ligase complex (PubMed:29911972). MAEA is required for normal cell proliferation (PubMed:29911972). The CTLH E3 ubiquitin-protein ligase complex is not required for the degradation of enzymes involved in gluconeogenesis, such as FBP1 (PubMed:29911972). Plays a role in erythroblast enucleation during erythrocyte maturation and in the development of mature macrophages (By similarity). Mediates the attachment of erythroid cell to mature macrophages; this MAEA-mediated contact inhibits erythroid cell apoptosis (PubMed:9763581). Participates in erythroblastic island formation, which is the functional unit of definitive erythropoiesis. Associates with F-actin to regulate actin distribution in erythroblasts and macrophages (By similarity). May contribute to nuclear architecture and cells division events (Probable).
Cellular Location	Cytoplasm {ECO:0000250|UniProtKB:Q4VC33}. Nucleus, nucleoplasm. Nucleus matrix. Cell membrane. Cytoplasm, cytoskeleton. Note=Detected in a nuclear, speckled- like pattern (PubMed:16510120). Localized with condensed chromatin at prophase; Detected in nuclear spindle poles at metaphase and in the contractile ring during telophase and cytokinesis (PubMed:16510120) Present in cytoplasm, nuclear matrix and at the cell surface in macrophages; predominantly nuclear in immature macrophages and predominantly detected at the cell surface in mature macrophages Colocalizes with F-actin in macrophages (By similarity) {ECO:0000250|UniProtKB:Q4VC33, ECO:0000269|PubMed:16510120}
Tissue Location	Detected at macrophage membranes (at protein level). Ubiquitous.

Background

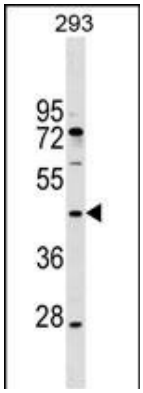
This gene product mediates the attachment of erythroblasts to macrophages. This attachment promotes terminal maturation and enucleation of erythroblasts, presumably by suppressing apoptosis. This protein is an integral membrane protein with the N-terminus on the extracellular side and the C-terminus on the cytoplasmic side of the cell. Two immunologically related isoforms of erythroblast macrophage protein with apparent molecular weights of 33 kD and 36 kD were detected in macrophage membranes; this gene encodes the larger isoform. Multiple alternatively spliced transcript variants encoding distinct isoforms have been found for this gene, but the biological validity of some variants has not been determined.

References

Kobayashi, N., et al. Gene 396(2):236-247(2007)
Bala, S., et al. Biochem. Biophys. Res. Commun. 342(4):1040-1048(2006)
Hanspal, M., et al. Blood 92(8):2940-2950(1998)

Images

MAEA Antibody (N-term) (Cat. #AP17927a) western blot analysis in 293 cell line lysates (35ug/lane).This demonstrates the MAEA antibody detected the MAEA protein (arrow).



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