

For Research Use Only

MAEA Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number: 83267-4-PBS



Basic Information

Catalog Number: 83267-4-PBS	GenBank Accession Number: BC001225	Purification Method: Protein A purification
Size: 100ug , Concentration: 1mg/ml by Nanodrop;	GeneID (NCBI): 10296	CloneNo.: 240097E6
Source: Rabbit	UNIPROT ID: Q7L5Y9	
Isotype: IgG	Full Name: macrophage erythroblast attacher	
Immunogen Catalog Number: AG27150	Calculated MW: 45 kDa	
	Observed MW: 45 kDa	

Applications

Tested Applications:
WB, IF/ICC, FC (Intra), Cytometric bead array, Sandwich ELISA, Indirect ELISA, Sample test

Species Specificity:
human

Product Information

83267-4-PBS targets MAEA as part of a matched antibody pair:

MP00233-3: 83267-4-PBS capture and 83267-2-PBS detection (validated in Cytometric bead array)

MP00233-4: 83267-3-PBS capture and 83267-4-PBS detection (validated in Sandwich ELISA)

Unconjugated rabbit recombinant monoclonal antibody in PBS only (BSA and azide free) storage buffer at a concentration of 1 mg/mL, ready for conjugation. Created using Proteintech's proprietary in-house recombinant technology. Recombinant production enables unrivalled batch-to-batch consistency, easy scale-up, and future security of supply.

This conjugation ready format makes antibodies ideal for use in many applications including: ELISAs, multiplex assays requiring matched pairs, mass cytometry, and multiplex imaging applications. Antibody use should be optimized by the end user for each application and assay.

Background Information

MAEA (macrophage erythroblast attacher) is a core component of the CTLH E3 ubiquitin-protein ligase complex. MAEA is required for normal cell proliferation and plays a role in erythroblast enucleation during erythrocyte maturation and in the development of mature macrophages. N-terminus MAEA and full-length MAEA are mostly expressed in nuclear and can be detected at low level in the cytoplasm of some cells, while C-terminus MAEA can be detected in the cytoplasm and nucleoli within the nucleus. MAEA mediates the attachment of erythroid cell to mature macrophages which can inhibit erythroid cell apoptosis. The expression of MAEA may be associated with the type 2 diabetes mellitus. (PubMed: 28955747, 24143168, 29911972, 29911972, 30674470, 9763581).

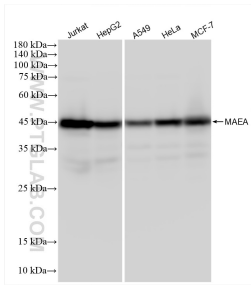
Storage

Storage:
Store at -80°C.
Storage Buffer:
PBS Only

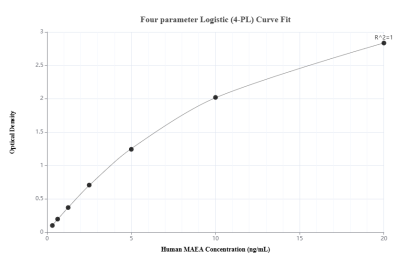
For technical support and original validation data for this product please contact:
T: 1 (888) 4PTGLAB (1-888-478-4522) (toll free in USA), or 1(312) 455-8498 (outside USA)
E: proteintech@ptglab.com
W: ptglab.com

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

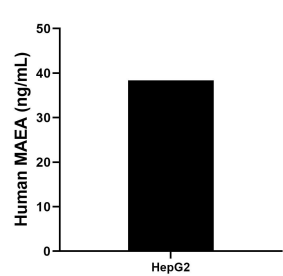
Selected Validation Data



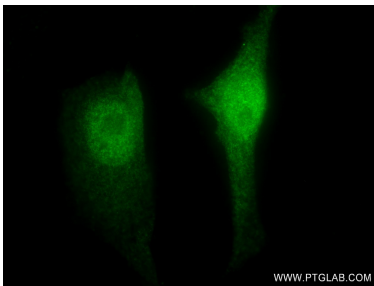
Various lysates were subjected to SDS PAGE followed by western blot with 83267-4-RR (MAEA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83267-4-PBS in a different storage buffer formulation.



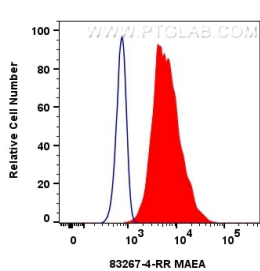
Sandwich ELISA standard curve of MP00233-4, Human MAEA Recombinant Matched Antibody Pair - PBS only. 83267-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag27150. 83267-4-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



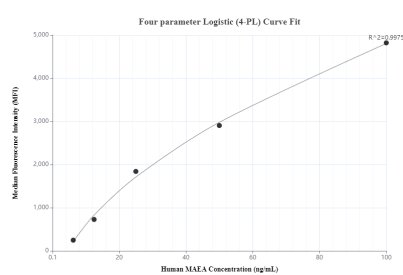
The mean MAEA concentration was determined to be 38.39 ng/mL in HepG2 cell extract based on a 1.0 mg/mL extract load.



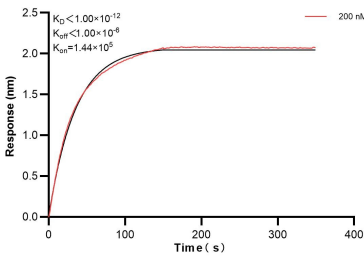
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MAEA antibody (83267-4-RR, Clone: 240097E6) at dilution of 1:200 and CoraLite®488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83267-4-PBS in a different storage buffer formulation.



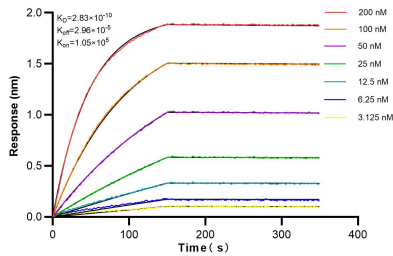
1x10⁶ HeLa cells were intracellularly stained with 0.25 ug MAEA Recombinant antibody (83267-4-RR, Clone:240097E6) and CoraLite®488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83267-4-PBS



Cytometric bead array standard curve of MP00233-3, MAEA Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 83267-4-PBS. Detection antibody: 83267-2-PBS. Standard: Ag27150. Range: 2.5-100 ng/mL



Biolayer interferometry (BLI) kinetic assay of 83267-4-PBS against Human MAEA was performed. The affinity constant is below 1 pM.



Biolayer interferometry (BLI) kinetic assays of 83267-4-RR against Human MAEA were performed. The affinity constant is 0.283 nM.