For Research Use Only

## MAEA Recombinant antibody, PBS Only (Capture/Detector)

Catalog Number:83267-4-PBS



**Purification Method:** 

Protein A purification

CloneNo.:

240097E6

**Basic Information** 

Catalog Number: GenBank Accession Number:

83267-4-PBS BC001225

Size: GeneID (NCBI): 1000  $\mu$  g/ml 10296 
Source: UNIPROT ID:

Rabbit Q7L5Y9
Isotype: Full Name:

IgG macrophage erythroblast attacher

Immunogen Catalog Number: Calculated MW:

AG27150 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

**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

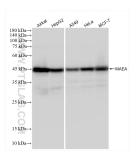
Storage:

Store at -80°C.

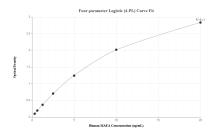
The product is shipped with ice packs. Upon receipt, store it immediately at -80°C  $\,$ 

Storage Buffer: PBS Only

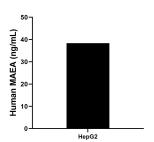
## Selected Validation Data



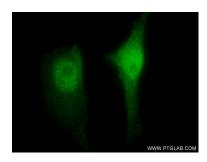
Various lysates were subjected to SDS PAGE followed by western blot with 83267-4-RR (MAEA antibody) at dilution of 1:10000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 83267-4-PBS in a different storage buffer formulation.



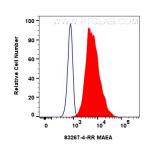
Sandwich ELISA standard curve of MP00233-4, Human MAEA Recombinant Matched Antibody Pair - PBS only. 83267-3-PBS was coated to a plate as the capture antibody and incubated with serial dilutions of standard Ag27150. 83267-4-PBS was HRP conjugated as the detection antibody. Range: 0.313-20 ng/mL



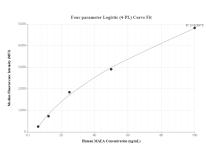
The mean MAEA concentration was determined to be 38.39 ng/mL in HepG2 cell extract based on a 1.0 mg/mL extract load.



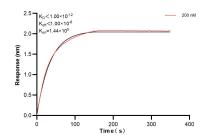
Immunofluorescent analysis of (4% PFA) fixed HeLa cells using MAEA antibody (83267-4-RR, Clone: 240097E6) at dilution of 1:200 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). This data was developed using the same antibody clone with 83267-4-PBS in a different storage buffer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



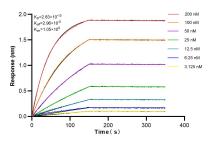
1x10^6 HeLa cells were intracellularly stained with 0.25 ug MAEA Recombinant antibody (83267-4-RR, Clone:240097E6) and CoraLite@488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.25 ug Rabbit IgG Isotype Control Recombinant Antibody (98136-1-RR, Clone: 240953C9) (blue). Cells were fixed and permeabilized with Transcription Factor Staining Buffer Kit (PF00011). This data was developed using the same antibody clone with 83267-4-PBS in a



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.