

CLEC 4E Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP59030

Specification

CLEC 4E Polyclonal Antibody - Product Information

Application IHC-P, IHC-F, IF, E
Primary Accession
Reactivity Rat, Bovine
Host Rabbit
Clonality Polyclonal
Calculated MW 25073

CLEC 4E Polyclonal Antibody - Additional Information

Gene ID 26253

Other Names

C-type lectin domain family 4 member E, C-type lectin superfamily member 9, Macrophage-inducible C-type lectin, MINCLE, CLEC4E {ECO:0000303|PubMed:24101491, ECO:0000312|HGNC:HGNC:14555}

Dilution

IHC-P~~N/A<br \> <span class
="dilution_IHC-F">IHC-F~~N/A<br \> <span class
="dilution_IF">IF~~1:50~200<br \> E~~N/A

Format

0.01M TBS(pH7.4), 0.09% (W/V) sodium azide and 50% Glyce

Storage

Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

CLEC 4E Polyclonal Antibody - Protein Information

Name CLEC4E {ECO:0000303|PubMed:24101491, ECO:0000312|HGNC:HGNC:14555}

Function

Calcium-dependent lectin that acts as a pattern recognition receptor (PRR) of the innate immune system: recognizes damage- associated molecular patterns (DAMPs) of abnormal self and pathogen- associated molecular patterns (PAMPs) of bacteria and fungi (PubMed:18509109, PubMed:23602766). The PAMPs notably include mycobacterial trehalose 6,6'-dimycolate (TDM), a cell wall glycolipid with potent adjuvant immunomodulatory functions (PubMed:23602766, PubMed:24101491). Interacts



with signaling adapter Fc receptor gamma chain/FCER1G to form a functional complex in myeloid cells (By similarity). Binding of mycobacterial trehalose 6,6'-dimycolate (TDM) to this receptor complex leads to phosphorylation of the immunoreceptor tyrosine-based activation motif (ITAM) of FCER1G, triggering activation of SYK, CARD9 and NF-kappa-B, consequently driving maturation of antigen-presenting cells and shaping antigen-specific priming of T- cells toward effector T-helper 1 and T-helper 17 cell subtypes (By similarity). Also recognizes alpha-mannose residues on pathogenic fungi of the genus Malassezia and mediates macrophage activation (By similarity). Through recognition of DAMPs released upon nonhomeostatic cell death, enables immune sensing of damaged self and promotes inflammatory cell infiltration into the damaged tissue (By similarity).

Cellular Location

Cell membrane; Single-pass type II membrane protein. Cell projection, phagocytic cup {ECO:0000250|UniProtKB:Q9R0Q8}

Tissue Location

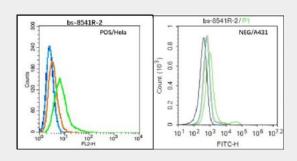
Expressed in monocytes and macrophages.

CLEC 4E Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

CLEC 4E Polyclonal Antibody - Images



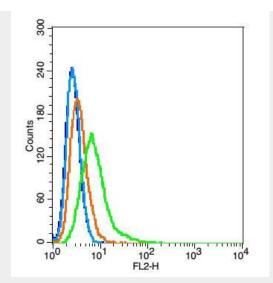
Black line : Positive blank control (Hela); Negative blank control (A431☐ Green line : Primary Antibody (Rabbit Anti-CLEC 4E antibody (bs-8541R))

Orange line Isotype Control Antibody (Rabbit IgG).

Blue line: Secondary Antibody (Goat anti-rabbit IgG-PE)/(Goat anti-rabbit IgG-AF488)

Hela Positive and A431 Negative control cells (black) were incubated in 5% BSA blocking buffer for 30 min at room temperature. Cells were then stained with CLEC 4E Antibody(bs-8541R) at 1:50 dilution in blocking buffer and incubated for 30 min at room temperature, washed twice with 2% BSA in PBS, followed by secondary antibody(blue) incubation for 40 min at room temperature. Acquisitions of 20,000 events were performed. Cells stained with primary antibody (green), and isotype control (orange).





Blank control: Hela(blue), the cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with ice-cold 90% methanol for 30 min on ice.

Isotype Control Antibody: Rabbit IgG(orange); Secondary Antibody: Goat anti-rabbit IgG-PE(white blue), Dilution: 1:200 in 1 X PBS containing 0.5% BSA; Primary Antibody Dilution: 5 μ g in 100 μ L1X PBS containing 0.5% BSA(green).