NKMAXBiO We support you, we believe in your research Human MINCLE/CLEC4E antibody Catalog Number: ATGA0175

# **PRODUCT INFORMATION**

Catalog number ATGA0175

Clone No. AT16E3

**Product type** Monoclonal Antibody

UnitProt No. Q9ULY5

NCBI Accession No. NP\_055173

## **Alternative Names**

CLEC4E, CLECSF9, C-type lectin domain family 4 member E, C-type lectin superfamily member 9, Macrophage lectin 2, Macrophage-inducible C-type lectin, MINCLE, NtmntanCLEC4E Ege lectin 2

# **PRODUCT SPECIFICATION**

Antibody Host Mouse

**Reacts With** 

Human

Concentration 1mg/ml (determined by BCA assay)

## Formulation

Liquid in. Phosphate-Buffered Saline (pH 7.4) with 0.02% Sodium Azide, 10% glycerol

## Immunogen

Recombinant human MINCLE (41-219aa) purified from E.coli

# lsotype

IgG2b kappa

**Purification Note** By protein-G affinity chromatography

## Application

ELISA, WB, ICC/IF, IHC, FACS

# Usage

The antibody has been tested by ELISA, Western blot, ICC/IF, FACS and IHC analysis to assure specificity and reactivity. Since application varies, however, each investigation should be titrated by the reagent to obtain optimal results.



#### Storage

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

# BACKGROUND

#### Description

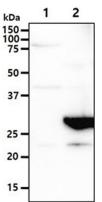
CLEC4E (macrophage inducible C-type lectin, also called MINCLE or CLECSF9), which is a diverse family of protein which was originally defined by their ability to recognize a wide range of ligand of carbohydrate structure. CLEC4E expressed in macrophages subjected to several types of stress. It plays an essential role in response to trehalose-6, 6'-dimycolate (TDM) and activated by a synthetic analogue, trehalose dibehenate (TDB). Recently it was reported that CLEC4E is associated with an immunoreceptor tyrosine-based activation motif-containing Fc receptor gamma chain (FcRgamma) and functions as an activating receptor for damaged self- and non-self-pathogenic fungi.

#### **General References**

Ishikawa E, et al. (2009) J Exp Med, 206(13):2879-88. Matsunaga I, et al. (2009) J Exp Med, 206(13):2865-8. Graham LM, et al. (2009) Cytokine, 48(1-2):148-55.

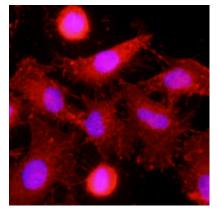
# DATA

#### Western blot analysis (WB)



The Cell lysates (40ug) were resolved by SDS-PAGE, transferred to PVDF membrane and probed with anti-human CLEC4E antibody (1:1000). Proteins were visualized using a goat anti-mouse secondary antibody conjugated to HRP and an ECL detection system. Lane 1. : 293T cell lysate Lane 2. : MINCLE transfected 293T cell lysate

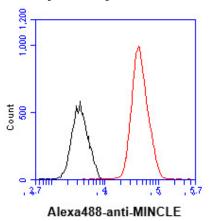
#### Immunocytochemistry/Immunofluorescence (ICC/IF)



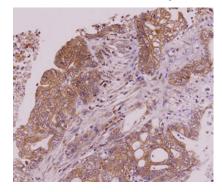
Immunofluorescence of human HeLa cells stained with monoclonal anti-human CLEC4E antibody (1:500) with Texas Red (Red). Nucleus was stained by Hoechst 33342 (Blue).

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## Flow cytometry (FACS)



Immunohistochemistry (IHC)



Flow cytometry analysis of CLEC4E in LNCap cell line, staining at 2-5ug for  $1\times10^{6}$  cells (red line). The secondary antibody used goat antimouse IgG Alexa fluor 488 conjugate. Isotype control antibody was mouse IgG (black line).

Paraffin embedded sections of colorectal cancer tissue were incubated with anti-human CLEC4E antibody (1:50) for 2 hours at room temperature. Antigen retrieval was performed in 0.1M sodium citrate buffer and detected using Diaminobenzidine (DAB).