Data Sheet (Cat.No.TMAY-01872F)

TargetMol

Anti-CLEC4A Antibody-FITC (8W176)

Product Details

Ig Type:	Mouse IgG1
Reactivity:	Human
Conjugation:	FITC
Clone:	8W176
Purification:	Protein A

Applications

Verified Activity:	Flow cytometric analysis of anti-human CLEC4A (DCIR) on human whole blood monocytes. The fluorescence histograms were derived from events with the forward and side light-scatter characteristics of viable monocytes.
Application:	FCM
Recommended	10 μl/Test, 0.1 mg/ml

Properties

Stability & Storage:	Store at 2°C-8°C for 12 months, do not freeze. Keep away from direct sunlight. Sodium azide is toxic to cells and should be disposed of properly. Flush with large volumes of water during disposal.
Shipping:	Shipping with blue ice.

Antigen Details

Immunogen:	Recombinant Protein: Human DCIR / CLEC4A / CLECSF6 protein (TMPY-01600)
Antigen Species:	Human
Synonyms:	C-type lectin domain family 4 member A
Biology Area:	ITIM/ITAM Immunoreceptors and Related Molecules

Research Background

Dendritic cell immunoreceptor (DCIR), also known as C-type lectin domain family 4 member A (CLEC4A), C-type lectin superfamily member 6 (CLECSF6), is a single-pass type II C-type lectin receptor expressed mainly in dendritic cells (DCs), which is a negative regulator of DC expansion and has a crucial role in maintaining the homeostasis of the immune system. The Dectin-2 family of C-type lectins that includes Dectin-2, BDCA-2, DCIR, DCAR, Clecsf8 and Mincle. These type II receptors contain a single extracellular carbohydrate recognition domain and have diverse functions in both immunity and homeostasis. DCIR is the only member of the family which contains a cytoplasmic signalling motif and has been shown to act as an inhibitory receptor, while BDCA-2, Dectin-2, DCAR and Mincle all associate with FcRgamma chain to induce cellular activation, including phagocytosis and cytokine production. Dectin-2 and Mincle have been shown to act as pattern recognition receptors for fungi, while DCIR acts as an attachment factor for HIV. In addition to pathogen recognition, DCIR has been shown to be pivotal in preventing autoimmune disease by controlling dendritic cell proliferation. DCIR expressed on antigen presenting cells and granulocytes and acts as an inhibitory receptor via an intracellular immunoreceptor tyrosine-based inhibitory motif (ITIM). It may also be involved via its ITIM motif in the inhibition of B-cell-receptor-mediated calcium mobilization and protein tyrosine phosphorylation. Additionally, DCIR can participate in the capture of HIV-1 and promote

infection in trans and in cis of autologous CD4(+) T cells from human immature monocyte-derived DCs. DCIR acts as a ligand for HIV-1 and is involved in events leading to productive virus infection.

Tel:781-999-4286 E_mail:info@targetmol.com Address:34 Washington Street,Wellesley Hills,MA 02481