

APC Rabbit anti-Human CD83 mAb

Catalog NO.: A28804

Basic Information

Observed MW

Calculated MW

Category

Monoclonal Antibodies

Applications

FC

Cross-Reactivity

Human

Conjugation

APC. Ex:650nm. Em:660nm.

Clone number

ARC81629

Background

Human CD83 is a 40-50 kDa member of the Siglec (or sialic acid-binding immunoglobulin-like lectin) transmembrane protein family. CD83 is a type I transmembrane glycoprotein, consisting of a 125 amino acid (aa) extracellular region, a 22 aa transmembrane segment and a 39 aa cytoplasmic domain. It contains a V-type Ig-like domain in the extracellular region and lacks an inhibitory cytoplasmic motif. Although in vitro studies have shown that CD83 exists in a covalently linked form, this does not seem to be the case in vivo. In the extracellular region, mouse and human CD83 share 66% aa identity. Compared to humans, mouse CD83 has a 11 aa shorter extracellular domain and is expressed as a 30 - 35 kDa protein. Human CD83 is active in mouse systems. Another junction form has been reported. This leads to a small 74 aa monomeric soluble form, including aa # 20-52 and # 164-205. In humans, proteolytic cleavage and solubilization of CD83 have also been suggested, which may result in a dimeric circulating CD83. CD83 is a major marker of dendritic cells. It is also found on B cells, neutrophils, monocytes and macrophages. Besides dendritic cells, CD83 expression is usually transient. CD83 binds to sialic acid on target cells. The function of CD83 has only gradually become clear. CD83 on the cell membrane seems to promote T cell proliferation, especially that of CD8+ cytotoxic T cells. However, soluble CD83 seems to have immunosuppressive and T cell activation blocking effects. On monocytes, CD83 is believed to drive monocytes towards a fibrocyte phenotype. Lack of membrane expression of CD83 leads to an IL-4/IL-10 producing CD4+ T cell phenotype.

Recommended Dilutions

FC 5 µl per 10⁶ cells in 100 µl volume

Immunogen Information

Gene ID

9308

Swiss Prot

Q01151

Immunogen

Recombinant protein (or fragment).This information is considered to be commercially sensitive.

Synonyms

BL11; HB15

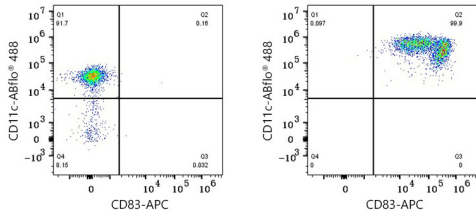
Contact

Product Information

☒		order@abclonal.com
☒		service@abclonal.com
☒		www.abclonal.com

Source	Isotype	Purification
Rabbit	IgG	Affinity purification
Storage		
Store at 2-8°C. Avoid freeze.		
Buffer: PBS with 0.09% Sodium azide,0.2% BSA,pH7.3.		

Validation Data



Flow cytometry: 1X10⁶ Human PBMC (untreated,left) and Human PBMC (treated with 20 ng/ml IL-4 and 20 ng/ml GM-CSF for 7days,and 20 ng/ml TNF-α for last two days,right) were surface-stained with ABflo® 488 Mouse anti-Human CD11c mAb (A27558,5 μl/Test) and APC Rabbit anti-Human CD83 mAb (A28804,5 μl/Test). Cells in the monocyte gate were used for analysis.

