ARG23658
anti-CD276 / B7-H3 antibody [MJ8] (PE)

Package: 50 tests
Store at: 4°C

Summary

Product Description	PE-conjugated Rat Monoclonal antibody [MJ8] recognizes CD276 / B7-H3. This product specifically recognizes mouse CD276, otherwise known as B7-H3, a ubiquitously expressed transmembrane glycoprotein and member of the B7 family of co-stimulatory molecules, which acts as both a positive and negative regulator of T-cell-mediated immune responses. CD276 is highly expressed in bone during embryogenesis, and can be induced on dendritic cells and monocytes by inflammatory cytokines. CD276 has been implicated in the development of acute and chronic transplant rejection, and is reported to have therapeutic potential as a regulator of cell-mediated immune responses to cancer, particularly in conjunction with anti-angiogenic therapy. In mice, CD276 has been linked with the development of pathogenic Th2 cells during the induction phase of allergic asthma (Nagashima et al. 2008).
Tested Reactivity	Ms
Tested Application	FACS
Host	Rat
Clonality	Monoclonal
Clone	MJ8
Isotype	IgG2b
Target Name	CD276 / B7-H3
Species	Mouse
Immunogen	Mouse IgG2a Fc-CD276 (aa 1-242).
Conjugation	PE
Alternate Names	B7-H3; B7 homolog 3; B7H3; 4Ig-B7-H3; B7RP-2; Costimulatory molecule; CD antigen CD276; CD276 antigen

Application Instructions

Application table

Application	Dilution
FACS	1:25 - 1:200

Application Note: FACS: Use 10 µl of the suggested working dilution to label 10^6 cells in 100 µl.
* The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.

Properties

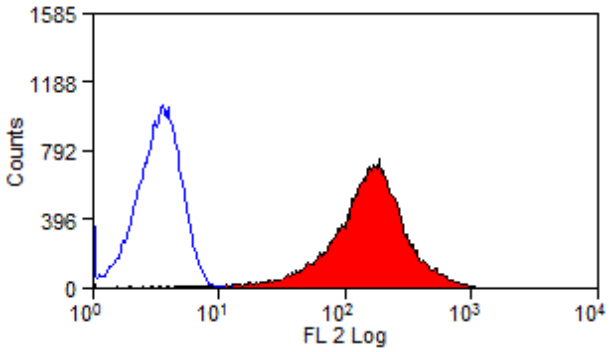
Form	Liquid
Purification	Purification with Protein G.
Buffer	PBS, 0.09% Sodium azide, 1% BSA and 5% Sucrose.
Preservative	0.09% Sodium azide

Stabilizer	1% BSA and 5% Sucrose
Storage instruction	Aliquot and store in the dark at 2-8°C. Keep protected from prolonged exposure to light. Avoid repeated freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.
Note	For laboratory research only, not for drug, diagnostic or other use.

Bioinformation

Gene Symbol	CD276
Gene Full Name	CD276 molecule
Background	The protein encoded by this gene belongs to the immunoglobulin superfamily, and thought to participate in the regulation of T-cell-mediated immune response. Studies show that while the transcript of this gene is ubiquitously expressed in normal tissues and solid tumors, the protein is preferentially expressed only in tumor tissues. Additionally, it was observed that the 3' UTR of this transcript contains a target site for miR29 microRNA, and there is an inverse correlation between the expression of this protein and miR29 levels, suggesting regulation of expression of this gene product by miR29. Alternatively spliced transcript variants encoding different isoforms have been found for this gene. [provided by RefSeq, Sep 2011]
Function	May participate in the regulation of T-cell-mediated immune response. May play a protective role in tumor cells by inhibiting natural-killer mediated cell lysis as well as a role of marker for detection of neuroblastoma cells. May be involved in the development of acute and chronic transplant rejection and in the regulation of lymphocytic activity at mucosal surfaces. Could also play a key role in providing the placenta and fetus with a suitable immunological environment throughout pregnancy. Both isoform 1 and isoform 2 appear to be redundant in their ability to modulate CD4 T-cell responses. Isoform 2 is shown to enhance the induction of cytotoxic T-cells and selectively stimulates interferon gamma production in the presence of T-cell receptor signaling. [UniProt]
Highlight	Related products: CD276 antibodies; Anti-Rat IgG secondary antibodies; Related news: Examining CTL/NK-mediated cytotoxicity by ELISA
Calculated Mw	57 kDa

Images



ARG23658 anti-CD276 / B7-H3 antibody [MJ8] (PE) FACS image

Flow Cytometry: Mouse CD276 transfected cells stained with ARG23658 anti-CD276 / B7-H3 antibody [MJ8] (PE).