

FITC anti-mouse CD43 Activation-Associated Glycoform Antibody

Catalog# / Size	121206 / 200 µg
Clone	1B11
Regulatory Status	RUO
Other Names	Ly-48, Leukosialin, Sialophorin, Leukocyte Sialoglycoprotein, gp115
Isotype	Rat IgG2a, κ
Description	CD43, also known as Ly-48, Leukosialin, Sialophorin, Leukocyte Sialoglycoprotein, and gp115, is a large single chain of type I transmembrane glycoprotein with abundant O-glycosylation and sialylation sites. Due to variable glycosylation and sialylation, two isoforms of CD43 have been identified. The 115 kD glycoform of CD43 is expressed on most hematopoietic cells including T lymphocytes, NK cells, monocytes, granulocytes, platelets, and CD5 ⁺ B cells. It is not present on resting B cells and erythrocytes. While the 130 kD glycoform is thought to be activation-associated form primarily expressed on myeloid cells, pre-B cells, and activated T cells. It has been reported that CD43 binds to CD54 and Siglec-1. CD43 plays dual roles in cell adhesion and anti-adhesion, as well as costimulation of T cell activation and survival, and induction of apoptosis of T cells and hematopoietic progenitors. The 1B11 antibody reacts with the activation-associated glycoform of CD43. The epitope recognized by 1B11 is also shared with desialylated CD45RB. This antibody is useful for differentiation of effector CD8 T cells and memory T cells.

Product Details

Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse WEHI 274.3 myeloid tumor cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze.
Application	FC - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is ≤ 1.0 µg per 10 ⁶ cells in 100 µl. It is recommended that the reagent be titrated for optimal performance for each application.
Excitation Laser	Blue Laser (488 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunoprecipitation ^{1,2} , Western blotting ^{1,2} , and immunohistochemistry of acetone-fixed frozen sections.
Application References	<ol style="list-style-type: none"> 1. Jones AT, <i>et al.</i> 1994. <i>J. Immunol.</i> 153:3426. (IP, WB) 2. Carlow DA, <i>et al.</i> 1999. <i>J. Immunol.</i> 163:1441. (IP, WB) 3. Onami TM, <i>et al.</i> 2002. <i>J. Immunol.</i> 168:6022. 4. van der Most RG, <i>et al.</i> 2003. <i>Intl. Immunol.</i> 15:119. 5. Chu VT, <i>et al.</i> 2007. <i>J. Immunol.</i> 179:5947. 6. Lang A, <i>et al.</i> 2008. <i>J. Immunol.</i> 180:4848. PubMed 7. Gibbert K, <i>et al.</i> 2010. <i>J. Immunol.</i> 185:6179. PubMed
(PubMed link indicates BioLegend citation)	
Product Citations	<ol style="list-style-type: none"> 1. Kidder D, <i>et al.</i> 2013. <i>J Immunol.</i> 190:2593. PubMed

2. Barrett N, *et al.* 2016. Cell Rep. 16: 1039-1054. [PubMed](#)
3. Rubinstein M, *et al.* 2008. Blood. 112:3704. [PubMed](#)
4. Bánki Z, *et al.* 2010. PLoS One. 5:e1000891. [PubMed](#)

RRID AB_493386 (BioLegend Cat. No. 121206)

Antigen Details

Structure	Single chain of type I transmembrane glycoprotein with abundant O-glycosylation and sialylation sites, 115 kD and 130 kD glycoforms with different glycosylation and sialylation
Distribution	Most hematopoietic cells including peripheral T cells, NK cells, granulocytes, monocytes, thymocytes, platelets, plasma cells, CD5 ⁺ B-1 cells and activated B cells, and hematopoietic progenitor cells.
Function	Play a dual roles in cell-cell adhesion and anti-adhesion, costimulation of cell activation and survival, induce apoptosis of T cells and hematopoietic progenitors
Ligand/Receptor	CD54, Siglec-1
Cell Type	T cells, NK cells, Granulocytes, Monocytes, Thymocytes, Platelets, Plasma cells, B cells, Hematopoietic stem and progenitors
Biology Area	Immunology
Molecular Family	Adhesion Molecules, CD Molecules
Antigen References	<ol style="list-style-type: none"> 1. van den Berg TK, <i>et al.</i> 2001. <i>J. Immunol.</i> 166:3637. 2. Moore T, <i>et al.</i> 1994. <i>J. Immunol.</i> 153:4978. 3. Onami TM, <i>et al.</i> 2002. <i>J. Immunol.</i> 168:6022. 4. Tong J, <i>et al.</i> 2004. <i>J. Exp. Med.</i> 199:1277. 5. Jones AT, <i>et al.</i> 1994. <i>J. Immunol.</i> 153:3426.
Gene ID	20737

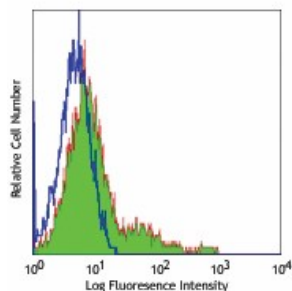
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Purified anti-mouse CD43 Activation-Associated Glycoform, Biotin anti-mouse CD43 Activation-Associated Glycoform, FITC anti-mouse CD43 Activation-Associated Glycoform, PE anti-mouse CD43 Activation-Associated Glycoform, Alexa Fluor® 488 anti-mouse CD43 Activation-Associated Glycoform, Alexa Fluor® 647 anti-mouse CD43 Activation-Associated Glycoform, APC anti-mouse CD43 Activation-Associated Glycoform, PE/Cyanine5 anti-mouse CD43 Activation-Associated Glycoform, PE/Cyanine7 anti-mouse CD43 Activation-Associated Glycoform, APC/Cyanine7 anti-mouse CD43 Activation-Associated Glycoform, PerCP anti-mouse CD43 Activation-Associated Glycoform, PerCP/Cyanine5.5 anti-mouse CD43 Activation-Associated Glycoform, PE/Dazzle™ 594 anti-mouse CD43 Activation-Associated Glycoform

Product Data



C57BL/6 mouse splenocytes stained with 1B11 FITC

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