

Technical Data Sheet

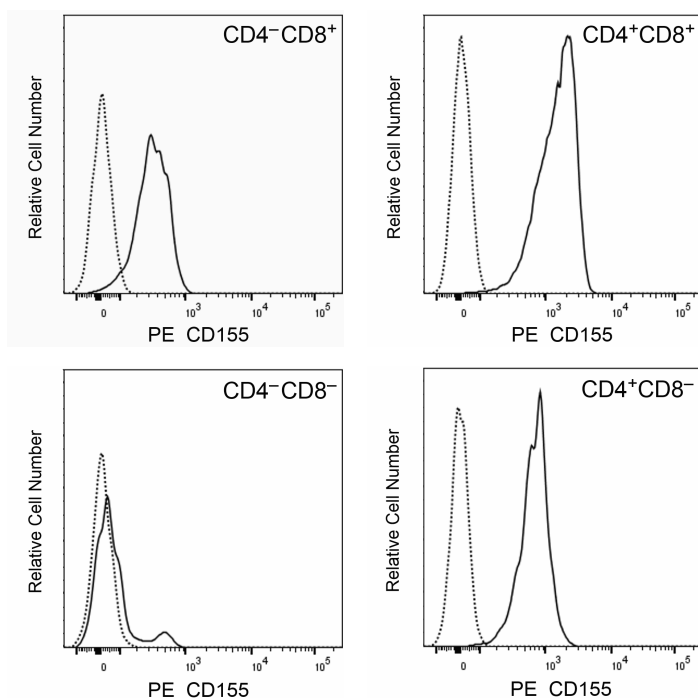
PE Rat Anti-Mouse CD155

Product Information

Material Number:	566720
Alternate Name:	CD155; Pvr; D7Erd458e; PVS; Taa1; Tage4; HVED; necl-5
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	TX56
Immunogen:	Mouse CD155 Transfected Cell Line
Isotype:	Rat IgG2a, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The TX56 monoclonal antibody specifically recognizes CD155, which is also known as Poliovirus Receptor (PVR), Tumor-associated glycoprotein E4 (Tage4), or Tumor-associated antigen 1 (Taa1). CD155 is a type I transmembrane glycoprotein that belongs to the Ig supergene family. CD155 is an adhesion receptor that binds to different ligands including nectin-3, CD96 (Tactile), CD226 (DNAM-1), TIGIT, and the extracellular matrix protein vitronectin. It is highly expressed on double-positive thymocytes and variably expressed on mature thymocytes and T cells, including regulatory T cells and NKT cells. CD155 is also differentially expressed on subsets of B cells, plasma cells, dendritic cells, and monocytes. CD155 expression is upregulated by activated T cells, B cells, and dendritic cells. CD155 is involved in forming adherens junctions between adjacent epithelial or endothelial cells. CD155 plays roles in regulating cell growth, adhesion, motility, migration as well as NK and T cell-mediated cytotoxicity.



Multicolor flow cytometric analysis of CD155 expression on mouse thymocytes. C57BL/6 mouse thymocytes were preincubated with Purified Rat Anti-Mouse CD16/CD32 antibody (Mouse BD Fc Block™) (Cat. No. 553141/553142). The cells were then stained with FITC Rat Anti-Mouse CD8a (Cat. No. 553031/553030/561966) and APC Rat Anti-Mouse CD4 (Cat. No. 553051/561091) antibodies, and either PE Rat IgG2a, κ Isotype Control (Cat. No. 553930; dashed line histograms) or PE Rat Anti-Mouse CD155 antibody (Cat. No. 566719/566720; solid line histograms) at 0.5 µg/test. The fluorescence histograms showing CD155 expression (or Ig Isotype control staining) were derived from CD4-CD8+ (Upper Left Panel), CD4+CD8+ (Upper Right), CD4-CD8- (Lower Left), or CD4+CD8- (Lower Right) gated events with the forward and side light-scatter characteristics of viable thymocytes. Flow cytometry and data analysis were performed using a BD LSRFortessa™ X-20 Cell Analyzer System and FlowJo® software. Data shown on this Technical Data Sheet are not lot specific.

Preparation and Storage

Store undiluted at 4°C and protected from prolonged exposure to light. Do not freeze.

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography.

The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed.

Application Notes

Application

Flow cytometry

Routinely Tested

BD Biosciences

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Suggested Companion Products

<u>Catalog Number</u>	<u>Name</u>	<u>Size</u>	<u>Clone</u>
561966	FITC Rat Anti-Mouse CD8a	25 µg	53-6.7
553030	FITC Rat Anti-Mouse CD8a	0.1 mg	53-6.7
553051	APC Rat Anti-Mouse CD4	0.1 mg	RM4-5
561091	APC Rat Anti-Mouse CD4	25 µg	RM4-5
553031	FITC Rat Anti-Mouse CD8a	0.5 mg	53-6.7
566719	PE Rat Anti-Mouse CD155	0.1 mg	TX56
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
553141	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.1 mg	2.4G2
553142	Purified Rat Anti-Mouse CD16/CD32 (Mouse BD Fc Block™)	0.5 mg	2.4G2
554656	Stain Buffer (FBS)	500 mL	(none)
554657	Stain Buffer (BSA)	500 mL	(none)

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. An isotype control should be used at the same concentration as the antibody of interest.
3. Caution: Sodium azide yields highly toxic hydrazoic acid under acidic conditions. Dilute azide compounds in running water before discarding to avoid accumulation of potentially explosive deposits in plumbing.
4. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.
5. Please refer to www.bdbiosciences.com/pharming/protocols for technical protocols.

References

Danisch S, Qiu Q, Seth S, et al. CD226 interaction with CD155 impacts on retention and negative selection of CD8 positive thymocytes as well as T cell differentiation to follicular helper cells in Peyer's Patches. *Immunobiology*. 2013; 218(2):152-8. (Biology)

Iguchi-Manaka A, Kai H, Yamashita Y, et al. Accelerated tumor growth in mice deficient in DNAM-1 receptor. *J Exp Med*. 2008; 205(13):2959-2964. (Clone-specific: Flow cytometry)

Iguchi-Manaka A, Okumura G, Kojima H, et al. Increased Soluble CD155 in the Serum of Cancer Patients. *PLoS One*. 2016; 11(4):e0152982. (Clone-specific: ELISA)

Kourepini E, Paschalidis N, Simoes DC, Aggelakopoulou M, Grogan JL, Panoutsakopoulou V. TIGIT Enhances Antigen-Specific Th2 Recall Responses and Allergic Disease. *J Immunol*. 2016; 196(9):3570. (Clone-specific: Flow cytometry)

Lenac Rovic T, Kucan Brlic P, Kaynan N, et al. Inflammatory monocytes and NK cells play a crucial role in DNAM-1-dependent control of cytomegalovirus infection. *J Exp Med*. 2016; 213(9):1835-1850. (Clone-specific: Flow cytometry, Immunofluorescence)

Stanietsky N, Rovic TL, Glasner A, et al. Mouse TIGIT inhibits NK-cell cytotoxicity upon interaction with PVR. *Eur J Immunol*. 2013; 43(8):2138-50. (Biology)

Tahara-Hanaoka S, Shibuya K, Onoda Y et al. Functional characterization of DNAM-1 (CD226) interaction with its ligands PVR (CD155) and nectin-2 (PRR-2/CD112). *Int Immunol*. 2006; 16(4):533-538. (Biology)