

Technical Data Sheet

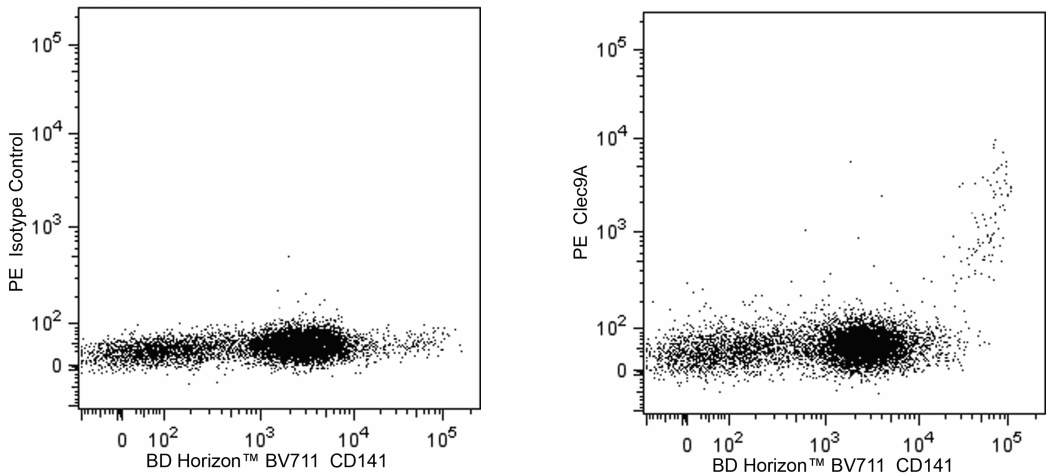
PE Rat Anti-Human Clec9A (CD370)

Product Information

Material Number:	563488
Alternate Name:	CD370; C-type lectin domain family 9 member A; CLEC9A; DNGR1
Size:	25 µg
Concentration:	0.2 mg/ml
Clone:	3A4/Clec9A (also known as 20/05-3A4 or 3A4)
Immunogen:	Human Clec9A Peptide
Isotype:	Rat (WI) IgG2a, κ
Reactivity:	QC Testing: Human Reported Reactivity: Monkey
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The 3A4/Clec9A monoclonal antibody specifically binds to human Clec9A (C-type lectin domain family member 9A). Clec9A is a type II transmembrane glycoprotein with a single extracellular C-type lectin domain. Clec9A is also known as CD370 and DNGR1 (Dendritic cell natural killer lectin group receptor 1). Clec9A is selectively expressed on CD141+ myeloid dendritic cells. Clec9A reportedly functions as an endocytic receptor for necrotic cells. It can mediate the cross-presentation of dead-cell associated antigens by dendritic cells in a Syk-dependent manner. The 3A4 antibody reportedly crossreacts with peripheral blood dendritic cells from Pigtail macaques (*Macaca nemestrina*).



Multicolor flow cytometric analysis of human Clec9a expression on dendritic cell subsets from human peripheral blood mononuclear cells. Human peripheral blood mononuclear cells (PBMC) were stained with either PE Rat IgG2a, κ Isotype Control (Cat. No. 553930; Left Panel) or PE Rat Anti-Human Clec9A (CD370) antibody (Cat. No. 563488; Right Panel). The cells were also stained with FITC Mouse Anti-Human HLA-DR (Cat. No. 555811), BD Horizon™ BV711 Mouse Anti-Human CD141 (Cat. No. 563155) and a Lineage cocktail comprised of BD Horizon™ V450-conjugated Mouse Anti-Human CD3 (Cat. No. 560366), Mouse Anti-Human CD14 (Cat. No. 560350), Mouse Anti-Human CD19 (Cat. No. 560354) and Mouse Anti-Human CD56 (Cat. No. 560361) antibodies. Two-color flow cytometric dot plots show the correlated expression patterns of Clec9A (CD370) (or Ig Isotype control staining) versus CD141 for Lineage-negative, HLA-DR-positive gated events with the forward and side light-scatter characteristics of viable leucocytes. Flow cytometric analysis was performed using a BD LSRFortessa™ Flow Cytometer System.

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
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Suggested Companion Products

Catalog Number	Name	Size	Clone
554656	Stain Buffer (FBS)	500 mL	(none)
553930	PE Rat IgG2a, κ Isotype Control	0.1 mg	R35-95
555811	FITC Mouse Anti-Human HLA-DR	100 Tests	G46-6
563155	BV711 Mouse Anti-Human CD141	50 Tests	1A4
560366	V450 Mouse Anti-Human CD3	30 Tests	UCHT1
560350	V450 Mouse Anti-Human CD14	30 Tests	M ϕ P9
560354	V450 Mouse Anti-Human CD19	30 Tests	HIB19
560361	V450 Mouse Anti-Human CD56	30 Tests	B159

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. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
5. For fluorochrome spectra and suitable instrument settings, please refer to our Multicolor Flow Cytometry web page at www.bdbiosciences.com/colors.

References

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Sancho D, Mourão-Sá D, Joffre OP, et al. Tumor therapy in mice via antigen targeting to a novel, DC-restricted C-type lectin. *J Clin Invest*. 2008; 118(6):2098-2110. (Biology)

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