

Technical Data Sheet

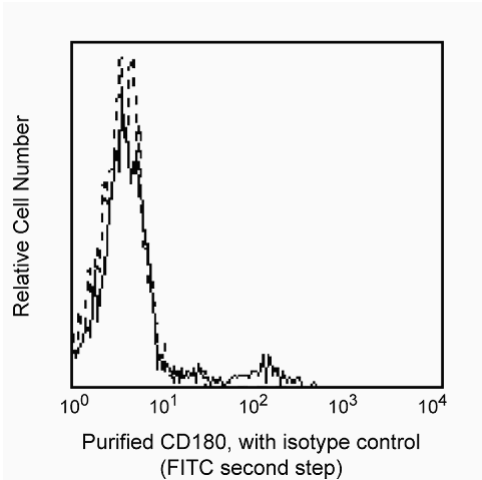
Purified Mouse Anti-Human CD180

Product Information

Material Number:	551890
Alternate Name:	RP105
Size:	0.1 mg
Concentration:	0.5 mg/ml
Clone:	G28-8
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Human
Workshop:	VII 70499
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

Reacts with RP105/Bgp95, a 95-105 kDa type I membrane protein consisting of extracellular leucine-rich repeats and a short cytoplasmic domain. It is expressed on mantle zone B cells, but weakly on germinal center B cells. RP105/Bgp95 is also expressed on peripheral blood monocytes, dendritic cells, and a subset of peripheral blood lymphocytes. The extracellular domain associates with a molecule called MD-1 to form a cell surface receptor complex RP105/Bgp95/MD-1. This receptor belongs to the family of toll-like receptors (TLR). Studies show that RP105/Bgp95/MD-1, working in concert with TLR4, controls B cell recognition and signaling of lipopolysaccharide (LPS). Reports on functional studies show that G28-8 monoclonal antibody can induce a G0 to G1 cell cycle transition and was synergistic with PMA, anti-μ, or anti-CD40 in inducing proliferation of resting B cells.



Profile of peripheral blood lymphocytes analyzed by flow cytometry. Second step staining with Cat. No. 555988.

Preparation and Storage

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

Store undiluted at 4° C.

Application Notes

Application

Flow cytometry	Routinely Tested
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Suggested Companion Products

Catalog Number	Name	Size	Clone
555746	Purified Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-21
555988	FITC Goat Anti-Mouse IgG/IgM	0.5 mg	Polyclonal

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharming/en/protocols for technical protocols.
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.

References

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Roshak AK, Anderson KM, Holmes SD. Anti-human RP105 sera induces lymphocyte proliferation. *J Leukoc Biol.* 1999; 65(1):43-49.(Biology)
Valentine MA, Clark EA, Shu GL, Norris NA, Ledbetter JA. Antibody to a novel 95-kDa surface glycoprotein on human B cells induces calcium mobilization and B cell activation. *J Immunol.* 1988; 140(12):4071-4078.(Biology)