

# Product datasheet

info@arigobio.com

ARG65445 anti-CD180 / RP105 antibody [G28-8] Package: 50 μg Store at: -20°C

## **Summary**

Product Description Mouse Monoclonal antibody [G28-8] recognizes CD180

Tested Reactivity Hu

Tested Application FACS, FuncSt, IP

Specificity The mouse monoclonal antibody G288 recognizes CD180, a 95105 kDa TLRlike glycoprotein expressed

on peripheral blood monocytes and dendritic cells, mantle zone B cells and marginal zone B cells, but

very weakly on germinal center B cells.

Host Mouse

Clonality Monoclonal

Clone G28-8

Isotype IgG1

Target Name CD180 / RP105

Species Human

Immunogen Human tonsillar B cells

Conjugation Un-conjugated

Alternate Names LY64; Radioprotective 105 kDa protein; CD180 antigen; CD antigen CD180; Lymphocyte antigen 64;

RP105; Ly78

# **Application Instructions**

Application table	Application	Dilution
	FACS	2 μg/ml
	FuncSt	Assay-dependent
	IP	Assay-dependent
Application Note	Functional studies: Induction of B cell proliferation.  * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Purified from cell culture supernatant by protein-A affinity chromatography.

Purity > 95% (by SDS-PAGE)

Buffer PBS (pH 7.4) and 15 mM Sodium azide

Preservative 15 mM Sodium azide

Concentration 1 mg/ml

Storage instruction For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot

and store at -20°C or below. Storage in frost free freezers is not recommended. 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

Database links <u>GeneID: 4064 Human</u>

Swiss-port # Q99467 Human

Gene Symbol CD180

Gene Full Name CD180 molecule

Background CD180, also known as RP105 (or Bgp95, LY64) is a type I membrane glycoprotein of Toll-like receptor

(TLR) family. Its cytoplasmic tail is short and unlike the TLRs, it lacks the TIR domain. CD180 expression is dependent on the coexpression of its helper molecule, MD-1, and mirrors that of TLR4 on antigen-presenting cells. CD180 regulates recognition of LPS and signaling in B cells, via interacting directly with the TLR4 signaling complex, inhibiting its ability to bind microbial ligands. Ligation of CD180 by monoclonal antibodies leads to B cell activation, upregulation of CD80/CD86, and increase in cell size.

Function May cooperate with MD-1 and TLR4 to mediate the innate immune response to bacterial

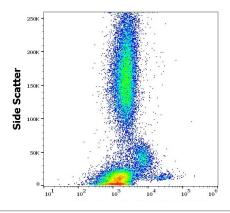
lipopolysaccharide (LPS) in B-cells. Leads to NF-kappa-B activation. Also involved in the life/death

decision of B-cells (By similarity). [UniProt]

Research Area Immune System antibody; Microbiology and Infectious Disease antibody

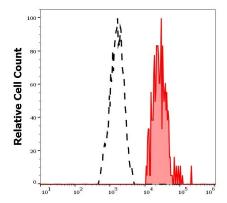
Calculated Mw 74 kDa

#### **Images**



#### ARG65445 anti-CD180 / RP105 antibody [G28-8] FACS image

Flow Cytometry: Human peripheral blood stained with ARG65445 anti-CD180 / RP105 antibody [G28-8] at 6  $\mu g/ml$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.



# ARG65445 anti-CD180 / RP105 antibody [G28-8] FACS image

Flow Cytometry: Separation of human CD180 positive lymphocytes (red-filled) from CD180 negative lymphocytes (black-dashed). Human peripheral whole blood stained with ARG65445 anti-CD180 / RP105 antibody [G28-8] at 6  $\mu g/ml$  dilution, followed by APC-conjugated Goat anti-Mouse antibody.