

# Product datasheet

info@arigobio.com

# ARG23112 anti-CD58 antibody [BRIC5]

Package: 100 μg Store at: -20°C

## Summary

**Product Description** 

Mouse Monoclonal antibody [BRIC5] recognizes CD58

Mouse anti Human CD58 antibody, clone BRIC5 recognizes human Lymphocyte function-associated antigen 3, also known as CD58 or LFA-3. CD58 is a 250 amino acid single pass type I transmembrane glycoprotein, a member of the immunoglobulin superfamily, with a predicted molecular mass of 28.1 kDa and an apparent molecular mass of  $^{\sim}$ 55-70 kDa. CD58 occurs in two forms, one transmembrane with a cytoplasmic domain, the other form anchored in the membrane via a

glycosylphosphatidylinositol tail. The complete amino acid sequence of both forms has been deduced from cDNA and is heavily N-glycosylated. CD58 is a cell adhesion molecule which plays a critical role in facilitation of antigen specific recognition through interaction with CD2 on T lymphocytes (Makgoba et al. 1989).CD58 has a wide tissue distribution, being present on erythrocytes, platelets, monocytes, a subset of lymphocytes, bone marrow cells, epithelium and endothelial cells. There are approximately 5,000 CD58 molecules on each erythrocyte. There is reduced expression of CD58 on haemopoietic cells in individuals with paroxysmal nocturnal haemoglobinuria. Mouse anti Human CD58 antibody, clone BRIC5 was produced in response to erythrocytes. The functional affinity of BRIC5 binding to erythrocytes is 4 x 108 M-1. It reacts by immunoblotting to non-reduced erythrocyte membranes. BRIC5 is an indirect haemagglutinin. The antigen on erythrocytes is pronase sensitive. BRIC5 inhibits T

cell rosetting.

Tested Reactivity Hu

Tested Application FACS, WB

Host Mouse

**Clonality** Monoclonal

Clone BRIC5
Isotype IgG2a
Target Name CD58
Species Human

Immunogen Human erythrocytes.

Conjugation Un-conjugated

Alternate Names CD antigen CD58; LFA3; ag3; Lymphocyte function-associated antigen 3; Surface glycoprotein LFA-3;

Ag3; LFA-3

#### **Application Instructions**

Application table	Application	Dilution
	FACS	1:10
	WB	Assay-dependent
Application Note	WB: This antibody binds a broadly migrating component of 40-65 kDa under non-reducing conditions. FACS: Use 10 $\mu$ l of the suggested working dilution to label 10^6 cells in 100 $\mu$ l. * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist.	

### **Properties**

Form Liquid

Purification Purification with Protein G.

Buffer Tissue Culture Supernatant and 0.09% Sodium azide

Preservative 0.09% 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

Gene Symbol CD58

Gene Full Name CD58 molecule

Background This gene encodes a member of the immunoglobulin superfamily. The encoded protein is a ligand of

the T lymphocyte CD2 protein, and functions in adhesion and activation of T lymphocytes. The protein is localized to the plasma membrane. Alternatively spliced transcript variants have been described.

[provided by RefSeq, Jan 2009]

Function Ligand of the T-lymphocyte CD2 glycoprotein. This interaction is important in mediating thymocyte

interactions with thymic epithelial cells, antigen-independent and -dependent interactions of T-lymphocytes with target cells and antigen-presenting cells and the T-lymphocyte rosetting with erythrocytes. In addition, the LFA-3/CD2 interaction may prime response by both the CD2+ and LFA-3+

cells. [UniProt]

Calculated Mw 28 kDa