

## Technical Data Sheet

**R718 Mouse Anti-Human Siglec-1 (CD169)**

## Product Information

Material Number:	751877
Size:	50 µg
Clone:	7-239
Alternative Name:	Sialoadhesin; SN; SIGLEC1; Siglec-1; Sialic acid-binding Ig-like lectin 1
Reactivity:	Tested in Development: Human
Isotype:	Mouse BALB/c IgG1, κ
Application:	Flow cytometry (Qualified)
Concentration:	0.2 mg/ml
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

## Description

The 7-239 monoclonal antibody specifically binds to Sialic acid-binding Ig-like lectin 1 (Siglec-1), which is also known as Sialoadhesin (SN), or CD169. Siglec-1 is a type I transmembrane glycoprotein that belongs to the Siglec family within the Ig superfamily. This adhesion molecule especially binds to glycolipids and glycoproteins with terminal α-2 sialyl residues. Siglec-1 is expressed by macrophages and dendritic cells and serves as a cellular interaction molecule. Its expression can be upregulated by cells in response to type II collagen, or to cytokines including interferons, and tumor necrosis factor. Siglec-1 plays roles in endocytosis, hematopoiesis, and leucocyte migration. It mediates macrophage binding to various cell types including developing and mature leucocytes. Siglec-1 that is expressed by dendritic cells can also bind HIV-1 and may mediate viral transfer to bystander CD4+ T cells. Several Siglec-1 counter-receptors have been described including CD43, CD206, and CD227 which are expressed by T cells, macrophages, or breast cancer cells, respectively. The 7-239 antibody reportedly blocks Siglec-1 functions in some cellular assay systems.

The antibody was conjugated to BD Horizon Red 718, which has been developed exclusively for BD Biosciences as a better alternative to Alexa Fluor® 700. BD Horizon Red 718 can be excited by the red laser (628 – 640 nm) and, with an Em Max around 718 nm, it can be detected using a 730/45 nm filter. Due to similar excitation and emission properties, we do not recommend using R718 in combination with APC-R700 or Alexa Fluor® 700.

## 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 to the dye under optimum conditions that minimize unconjugated dye and antibody.

## Recommended Assay Procedure

BD™ CompBeads can be used as surrogates to assess fluorescence spillover (Compensation). When fluorochrome conjugated antibodies are bound to BD CompBeads, they have spectral properties very similar to cells. However, for some fluorochromes there can be small differences in spectral emissions compared to cells, resulting in spillover values that differ when compared to biological controls. It is strongly recommended that when using a reagent for the first time, users compare the spillover on cells and BD CompBead to ensure that BD CompBeads are appropriate for your specific cellular application.

## Suggested Companion Products

Catalog Number	Name	Size
564219	Human BD Fc Block™	50 µg
554656	Stain Buffer (FBS)	500 mL
554657	Stain Buffer (BSA)	500 mL
555899	Lysing Buffer	100 mL
349202	Lysing Solution 10X Concentrate	100 mL
566928	R718 Mouse IgG1, κ Isotype Control	50 µg

## Product Notices

1. Researchers should determine the optimal concentration of this reagent for their individual applications.
2. The production process underwent stringent testing and validation to assure that it generates a high-quality conjugate with consistent performance and specific binding activity. However, verification testing has not been performed on all conjugate lots.
3. An isotype control should be used at the same concentration as the antibody of interest.
4. 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.
5. Alexa Fluor® is a registered trademark of Life Technologies Corporation.
6. Please refer to <http://regdocs.bd.com> to access safety data sheets (SDS).
7. Please refer to [www.bdbiosciences.com/us/s/resources](http://www.bdbiosciences.com/us/s/resources) for technical protocols.
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## References

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