

# Technical Data Sheet

## R718 Mouse Anti-Human CD1a

### Product Information

Material Number:	751847
Size:	50 µg
Clone:	SK9
Alternative Name:	CD1; T6/Leu-6; R4; T6; HTA-1; FCB6
Reactivity:	Tested in Development:Human
Isotype:	Mouse IgG2b, κ
Immunogen:	Human Thymocytes
Application:	Flow cytometry(Qualified)
Concentration:	0.2 mg/ml
Entrez Gene ID:	909
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.
Regulatory Status:	RUO

### Description

The SK9 monoclonal antibody specifically recognizes CD1a. CD1a is a ~49 kDa type I transmembrane glycoprotein that associates non-covalently with β2-microglobulin. The CD1a antigen is present on 60% to 90% of thymocytes, some T-cell leukemias and lymphomas, Langerhans cells, and a subset of dendritic cells. The CD1a antibody does not react with peripheral blood T and B lymphocytes, monocytes, normal bone marrow mononuclear cells, or normal tonsillar B and T lymphocytes. The CD1a antigen has structural similarities to MHC class I antigens and plays a role in the presentation of non-peptide antigens.

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	Clone
564219	Human BD Fc Block™	50 µg	Fc1
554656	Stain Buffer (FBS)	500 mL	
554657	Stain Buffer (BSA)	500 mL	
555899	Lysing Buffer	100 mL	
349202	Lysing Solution 10X Concentrate	100 mL	
566952	R718 Mouse IgG2b, κ Isotype Control	50 µg	27-35

## 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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