Technical Data Sheet

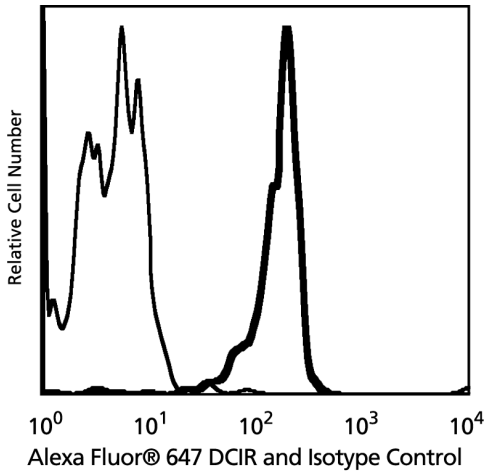
Alexa Fluor® 647 Mouse anti-human DCIR

Product Information

Material Number:	**558220**
Size:	100 tests
Vol. per Test:	20 µl
Clone:	I3-612
Isotype:	Mouse (BALB/c) IgG1, κ
Reactivity:	Human
Storage Buffer:	Aqueous buffered solution containing BSA and ≤0.09% sodium azide.

Description

The I3-612 antibody reacts with DCIR, or dendritic cell immunoreceptor, a newly identified member of the calcium-dependent (C-type) lectin family. DCIR is a type II membrane glycoprotein with a single carbohydrate recognition domain (CRD). Its cytoplasmic tail contains a consensus immunoreceptor tyrosine-based inhibitory motif (ITIM). It is expressed on monocytes, macrophages, B-lymphocytes, granulocytes, but not on NK or T cells. DCIR is strongly expressed on dendritic cells derived from peripheral blood monocytes cultured in presence of GM-CSF and IL-4. Down-regulation is observed on these with further maturation using TNF-α or LPS. Reports describe the detection of two distinct inhibitory signals depending on its ITIM tyrosine residue.



Expression of DCIR on monocytes. *Human blood cells were stained with either Alexa Fluor® 647 mAb I3-612 (bold histogram) or Alexa Fluor 647 mouse IgG1, κ isotype control mAb MOPC-21 (Cat. no. 557714), and erythrocytes were lysed using BD Pharm Lyse™ lysing buffer (Cat. no. 555899). Monocytes were selected by scatter profile. DCIR expression is strong on monocytes and granulocytes (data not shown) and weak on lymphocytes (data not shown). Flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.*

Preparation and Storage

The antibody was conjugated to Alexa Fluor® 647 under optimum conditions, and unreacted Alexa Fluor® 647 was removed.
Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Tested

Suggested Companion Products

Catalog Number	Name	Size	Clone
557714	Alexa Fluor 647® Mouse IgG1 κ Isotype Control	100 tests	MOPC-21

Product Notices

1. This reagent has been pre-diluted for use at the recommended Volume per Test. We typically use 1 X 10e6 cells in a 100-µl experimental sample (a test).
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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3. The Alexa Fluor®, Pacific Blue™, and Cascade Blue® dye antibody conjugates in this product are sold under license from Molecular Probes, Inc. for research use only, excluding use in combination with microarrays, or as analyte specific reagents. The Alexa Fluor® dyes (except for Alexa Fluor® 430), Pacific Blue™ dye, and Cascade Blue® dye are covered by pending and issued patents.
4. Alexa Fluor® 647 fluorochrome emission is collected at the same instrument settings as for allophycocyanin (APC).
5. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
6. 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.
7. Source of all serum proteins is from USDA inspected abattoirs located in the United States.

References

Bates EEM, Fournier N, Garcia E, et al. APCs express DCIR, a novel C-type lectin surface receptor containing an immunoreceptor tyrosine-based inhibitory motif. *J Immunol.* 1999; 163:1973-1983.(Biology)

Kanazawa N, Okazaki T, Nishimura H, et al. DCIR acts as an inhibitory receptor depending on its immunoreceptor tyrosine-based inhibitory motif. *J Invest Dermatol.* 2002; 118:261-266.(Biology)

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