

Technical Data Sheet

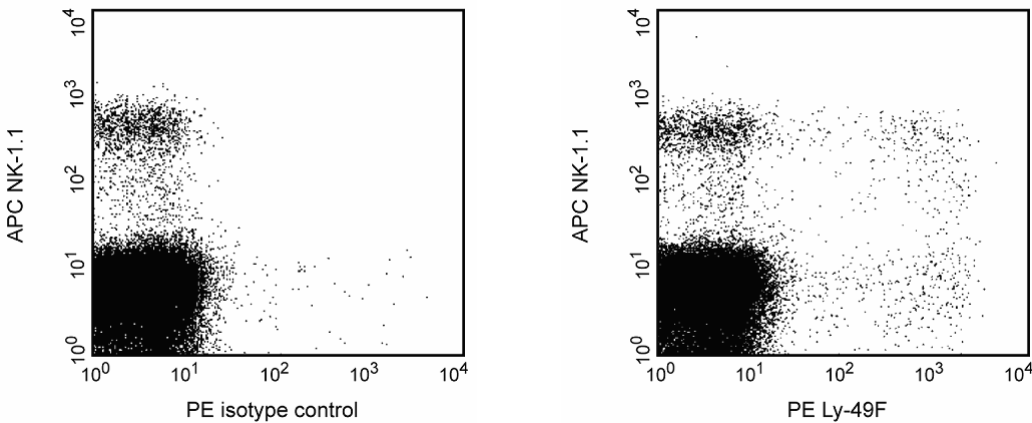
PE Mouse anti-mouse Ly-49F

Product Information

Material Number:	550987
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	HBF-719
Immunogen:	CHO-K1 cells transfected with the B6 allele of the Ly-49F gene,1 KlrA62 Transfected Cell Line
Isotype:	Mouse IgG1, κ
Reactivity:	QC Testing: Mouse
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The HBF-719 antibody reacts with the B6 alloantigen of Ly-49F, an inhibitory receptor which is expressed on subsets of natural killer (NK) cells, NK-1.1+ (or DX5+) T lymphocytes (NK-T cells), and on a population of memory CD8+ T lymphocytes in C57BL/6 mice, 1 but not AKR/J, BALB/c, C3H/HeN, DBA/1, or SJL mice.3 The Ly-49 family of NK-cell receptors are disulfide linked type-II transmembrane protein homodimers with extracellular carbohydrate recognition domains (CRD). The Ly-49 family members are expressed independently, such that an individual NKor T-cell may display more than one class of Ly-49 receptor homodimers. Ly-49F has an ITIM (Immunoreceptor Tyrosine-based Inhibitory Motif) in its cytoplasmic tail. Therefore, it is probably an inhibitory receptor. It weakly binds to cells expressing the H-2d MHC class I alloantigens.



Two-color analysis of Ly-49F expression on splenic NK cells. C57BL/6 splenocytes were simultaneously stained with APC-conjugated mAb PK136 (anti-mouse NK-1.1, Cat. no. 557391, both panels) and PE-conjugated mAb MOPC-31C (mouse IgG1, κ isotype control, Cat. no. 550617, Left Panel) or PE-conjugated mAb HBF-719 (Right Panel). Flow cytometry was performed on a FACSCalibur® (BDIS, San Jose, CA).

Preparation and Storage

The monoclonal antibody was purified from tissue culture supernatant or ascites by affinity chromatography. The antibody was conjugated with R-PE under optimum conditions, and unconjugated antibody and free PE were removed. Store undiluted at 4° C and protected from prolonged exposure to light. Do not freeze.

Application Notes

Application

Flow cytometry	Routinely Tested
----------------	------------------

BD Biosciences

www.bdbiosciences.com

United States	Canada	Europe	Japan	Asia Pacific	Latin America/Caribbean
877.232.8995	888.259.0187	32.53.720.550	0120.8555.90	65.6861.0633	55.11.5185.9995

For country-specific contact information, visit www.bdbiosciences.com/how_to_order/

Conditions: The information disclosed herein is not to be construed as a recommendation to use the above product in violation of any patents. BD Biosciences will not be held responsible for patent infringement or other violations that may occur with the use of our products. Purchase does not include or carry any right to resell or transfer this product either as a stand-alone product or as a component of another product. Any use of this product other than the permitted use without the express written authorization of Becton Dickinson and Company is strictly prohibited.

For Research Use Only. Not for use in diagnostic or therapeutic procedures. Not for resale.

BD, BD Logo and all other trademarks are the property of Becton, Dickinson and Company. ©2007 BD



Suggested Companion Products

Catalog Number	Name	Size	Clone
550617	PE Mouse IgG1, κ Isotype Control	0.1 mg	MOPC-31C

Product Notices

1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
2. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
3. For fluorochrome spectra and suitable instrument settings, please refer to our Fluorochrome Web Page at www.bdbiosciences.com/pharmingen/colors.
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.

References

Coles MC, McMahon CW, Takizawa H, Raulet DH. Memory CD8 T lymphocytes express inhibitory MHC-specific Ly49 receptors. *Eur J Immunol.* 2000; 30(1):236-244.(Immunogen)

Hanke T, Takizawa H, McMahon CW, et al. Direct assessment of MHC class I binding by seven Ly49 inhibitory NK cell receptors. *Immunity.* 1999; 11(1):67-77. (Biology)

Raulet DH, Held W, Correa I, Dorfman JR, Wu MF, Corral L. Specificity, tolerance and developmental regulation of natural killer cells defined by expression of class I-specific Ly49 receptors. *Immunol Rev.* 1997; 155:41-52.(Biology)

Takei F, Brennan J, Mager DL. The Ly-49 family: genes, proteins and recognition of class I MHC. *Immunol Rev.* 1997; 155:67-77.(Biology)

The Jackson Laboratory. Mouse Genome Database (MGD), Mouse Genome Informatics Web Site. Available: <http://www.informatics.jax.org> September, 2003. (Immunogen)