

Technical Data Sheet

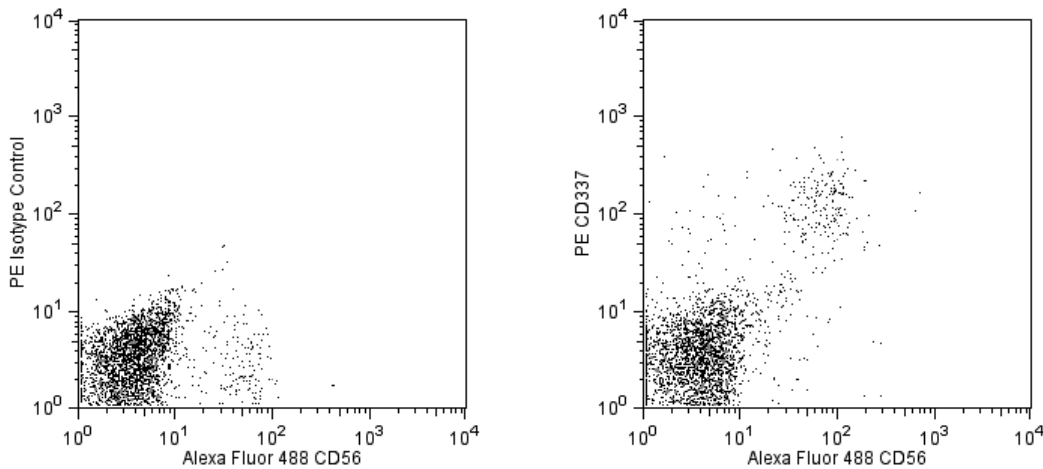
PE Mouse anti-Human CD337 (NKp30)

Product Information

Material Number:	558407
Alternate Name:	NKp30
Size:	0.1 mg
Concentration:	0.2 mg/ml
Clone:	p30-15
Immunogen:	Human NKp30 extracellular domain
Isotype:	Mouse IgG1, κ
Reactivity:	Human
Storage Buffer:	Aqueous buffered solution containing ≤0.09% sodium azide.

Description

The monoclonal antibody clone p30-15 reacts with CD337, also known as NKp30, a receptor found on the surface of natural killer (NK) cells. NK cells are large lymphoid cells discovered because of their ability to recognize and kill abnormal cells such as tumor and virally infected cells. NK cell immune responses are regulated by a balance of activating and inhibitory signals generated by cell surface receptors. Inhibitory receptors recognize MHC class I molecules on normal cells producing a negative signal to the NK cell. Loss of MHC class I expression in infected or transformed cells results in the loss of this negative signal leading to NK cell activation. In concert with the loss of inhibitory signals, activation signals via NK receptors such as NKp30, NKp44, NKp46, NKG2D, and NKp80 mediate the activation of NK cells. NKp30 cooperates with NKp46 and/or NKp44 in the induction of NK cell-mediated cytotoxicity against the majority of target cells.



Expression of CD337 (NKp30) in human NK cells. Human blood cells were stained with either PE anti-CD337 (right panel) or PE mouse IgG1 isotype control (left panel, Cat. No. 554680) and Alexa Fluor 488 Mouse anti-Human CD56 (Cat. No. 557699). Erythrocytes were lysed using BD PharmLyse™ lysis buffer (Cat. No. 555899). Viable lymphocytes were selected by scatter profile. Flow cytometry was performed on a BD FACSCalibur™ flow cytometry system.

Preparation and Storage

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	Tested
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Product Notices

- Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.
- 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

Augugliaro R, Parolini S, Castriconi , et al. Selective cross-talk among natural cytotoxicity receptors in human natural killer cells. *Eur J Immunol.* 2003; 33(5):1235-1241. (Biology)

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Flaig RM, Stark S, Watzl C. Cutting edge: NTB-A activates NK cells via homophilic interaction. *J Immunol*. 2004; 172(11):6524-6527. (Biology)

Pende D, Parolini S, Pessino A, et al. Identification and molecular characterization of NKP30, a novel triggering receptor involved in natural cytotoxicity mediated by human natural killer cells. *J Exp Med*. 1999; 190(10):1505-1516. (Biology)

Stark S, Flaig RM, Sandusky M, Watzl C. The use of trimeric isoleucine-zipper fusion proteins to study surface-receptor-ligand interactions in natural killer cells. *J Immunol Methods*. 2004; 296(1-2):149-158. (Biology)