

DESCRIPTION

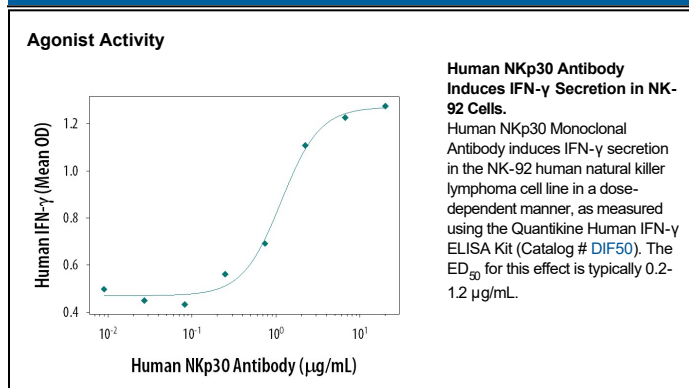
Species Reactivity	Human
Specificity	Detects human NKp30/NCR3 on cell transfectants and peripheral blood NK cells.
Source	Monoclonal Mouse IgG _{2A} Clone # 210845
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Mouse T cell hybridoma transfected with human NKp30/NCR3 and Mouse myeloma cell line NS0-derived recombinant human NKp30 Fc Chimera
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Agonist Activity	0.2-1.2 µg/mL	See Below
Flow Cytometry	2.5 µg/10 ⁶ cells	Human whole blood CD56 ⁺ natural killer cells
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.5 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

NKp30, along with NKp44 and NKp46, constitute a group of receptors termed "Natural Cytotoxicity Receptors" (1). These receptors play a major role in triggering NK-mediated killing of most tumor cell lines. NKp30 is a type I transmembrane protein having a single extracellular V-like immunoglobulin domain (2). A physical association with the ITAM-bearing accessory protein, CD3ζ, occurs via a charged residue in the NKp30 transmembrane domain. Ligand of NKp30 with a specific antibody results in phosphorylation of CD3ζ (3). NKp30 is expressed on both resting and activated NK cells of the CD56^{dim}, CD16⁺ subset that account for more than 85% of NK cells found in peripheral blood and spleen (4). NKp30 is absent from the CD56^{bright}, CD16⁻ subset that constitutes the majority of NK cells in lymph node and tonsil, however, its expression is up-regulated in these cells upon IL-2 activation (4). Studies with neutralizing antibodies reveal that NKp30 is partially responsible for triggering lytic activity against several tumor cell types and that it is the main receptor responsible for NK-mediated lysis of immature dendritic cells (2, 5). The ligand(s) recognized by NKp30 has not been described.

References:

1. Moretta, L. and A. Moretta (2004) EMBO J. **23**:255.
2. Pende, D. *et al.* (1999) J. Exp. Med. **190**:1505.
3. Augugliaro, R. *et al.* (2003) Eur. J. Immunol. **33**:1235.
4. Ferlazzo, G. *et al.* (2004) J. Immunol. **172**:1455.
5. Ferlazzo, G. *et al.* (2002) J. Exp. Med. **195**:343.