

DESCRIPTION

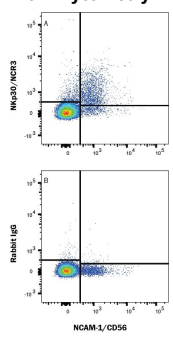
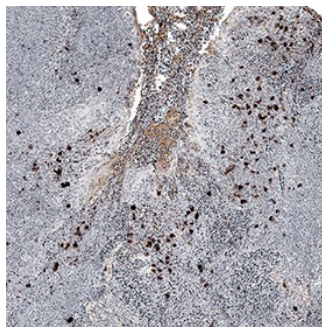
Species Reactivity	Human
Specificity	Detects human NKp30/NCR3 in direct ELISAs.
Source	Recombinant Monoclonal Rabbit IgG Clone # 2615A
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Mouse myeloma cell line NS0-derived human NKp30/NCR3 Leu19-Thr138 Accession # Q05D23
Formulation	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
Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Immunohistochemistry	1-25 µg/mL	See Below
CytoF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

DATA

<p>Flow Cytometry</p>  <p>Detection of NKp30/NCR3 in Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells (PBMCs) were stained with Mouse Anti-Human NCAM-1/CD56 PE-conjugated Monoclonal Antibody (Catalog # FAB2408P) and either (A) Rabbit Anti-Human NKp30/NCR3 Monoclonal Antibody (Catalog # MAB18492) or (B) Rabbit IgG Isotype Control (Catalog # MAB1050) followed by Goat anti-Rabbit IgG APC-conjugated secondary antibody (Catalog # F0111). View our protocol for Staining Membrane-associated Proteins.</p>	<p>Immunohistochemistry</p>  <p>NKp30/NCR3 in Human Tonsil. NKp30/NCR3 was detected in immersion fixed paraffin-embedded sections of human tonsil using Rabbit Anti-Human NKp30/NCR3 Monoclonal Antibody (Catalog # MAB18492) at 1 µg/mL for 1 hour at room temperature followed by incubation with the Anti-Rabbit IgG VisUCyte™ HRP Polymer Antibody (Catalog # VC003). Before incubation with the primary antibody, tissue was subjected to heat-induced epitope retrieval using Antigen Retrieval Reagent-Basic (Catalog # CTS013). Tissue was stained using DAB (brown) and counterstained with hematoxylin (blue). Specific staining was localized to cell surface in lymphocytes. View our protocol for IHC Staining with VisUCyte HRP Polymer Detection Reagents.</p>
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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 cells 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, CD3 ζ , occurs via a charged residue in the NKp30 transmembrane domain. Ligation of NKp30 with a specific antibody results in phosphorylation of CD3 ζ (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.