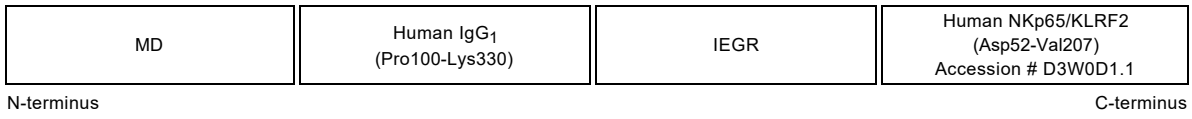
Recombinant Human NKp65/KLRF2 Fc Chimera

Catalog Number: 10371-NK

DESCRIPTION

Source

Chinese Hamster Ovary cell line, CHO-derived human NKp65/KLRF2 protein



N-terminal Sequence Analysis	Met Asp - Pro100
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	45 kDa

SPECIFICATIONS

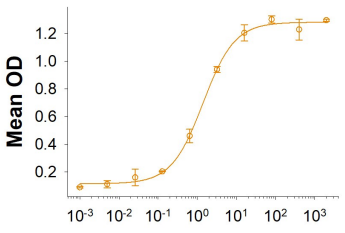
SDS-PAGE	50-65 kDa, under reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Human NKp65/KLRF2 Fc Chimera (Catalog # 10371-NK) is immobilized 0.1 µg the concentration of Recombinant Human CLEC-2A (Catalog # 8435-CL) the optimal binding response is approximately 0.5-3 ng/mL.
Endotoxin Level	<0.10 EU per 1 µg of the protein by the LAL method.
Purity	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 200 µg/mL in PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** • 12 months from date of receipt, -20 to -70 °C as supplied. • 1 month, 2 to 8 °C under sterile conditions after reconstitution. • 3 months, -20 to -70 °C under sterile conditions after reconstitution.

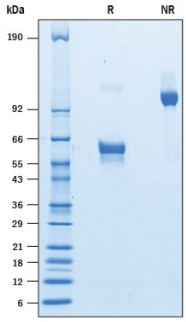
DATA

Binding Activity



Recombinant Human NKp65/KLRF2 Fc Chimera Protein Binding Activity When Recombinant Human NKp65/KLRF2 Fc Chimera (Catalog # 10371-NK) is immobilized at 0.1 µg/mL, 100 µL/well, the concentration for Recombinant Human CLEC-2A (Catalog # Catalog # 8435-CL) that produces 50% of the optimal binding response is approximately 0.5-3 ng/mL.

SDS-PAGE



Recombinant Human NKp65/KLRF2 Fc Chimera Protein SDS-PAGE 2 µg/lane of Recombinant Human NKp65/KLRF2 Fc Chimera (Catalog # 10371-NK) was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 50-65 kDa and 100-130 kDa, respectively.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475

Recombinant Human NKp65/KLRF2 Fc Chimera

Catalog Number: 10371-NK

BACKGROUND

Killer cell lectin-like receptor subfamily F member 2, also known as KLRF2 and NKp65, is a C-type lectin-like receptor and a member of the NKRP1 (NK receptor protein) subfamily (1-3). KLRF2, along with the related KLRF1, is an activating receptor for the C-type-lectin-like-2 (CLEC2) family of ligands (1-3). KLRF2 is a type II transmembrane glycoprotein with a short N-terminal cytoplasmic domain, a single transmembrane region and an extracellular domain (ECD) consisting of 26-residue stalk and 130-residue C-type lectin-like domain (CTLD) (1, 3). Unlike other members of the NKRP1 family such as KLRF1, KLRF2 is a non-disulfide-linked homodimer (1, 2). While sharing subfamily-specific traits classifying them as members of the NKRP1 subfamily, there does not appear to be a direct homolog of KLRF2 in mouse (2). KLRF2 is minimally expressed on peripheral blood NK cells and its ligand, Keratinocyte-associated C-type lectin (KACL), is restricted to human keratinocytes (1-3). This expression of KACL indicates potential implications in skin-affecting diseases such as psoriasis and wound healing (1). The signaling pathway of KLRF2 is distinct from most NK receptors because it does not utilize immunoreceptor tyrosine-based activating motif (ITAM)-containing signaling adaptors, but rather uses an activating signaling motif with only one tyrosine module referred to as hemITAM (1, 3).

References:

1. Spreu, J. *et al.* (2010) Proc Natl Acad Sci USA **107**:5100.
2. Bartel, Y. *et al.* (2013) Front Immunol **4**:362.
3. Li, Y. *et al.* (2013) Proc Natl Acad Sci USA **110**:11505.

Bio-Techne®
Global | bio-techne.com info@bio-techne.com techsupport@bio-techne.com TEL: 1.612.379.2956
USA | TEL: 800.343.7475 Canada | TEL: 855.668.8722 Europe | Middle East | Africa TEL: +44.0.1235.529449
China | info.cn@bio-techne.com TEL: 400.821.3475