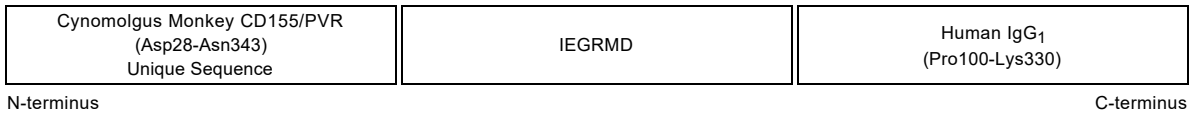
Recombinant Cynomolgus Monkey CD155/PVR Fc Chimera

Catalog Number: 10058-CD

DESCRIPTION

Source

Human embryonic kidney cell, HEK293-derived cynomolgus monkey CD155/PVR protein



N-terminal Sequence Analysis	Asp28
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	85 kDa

SPECIFICATIONS

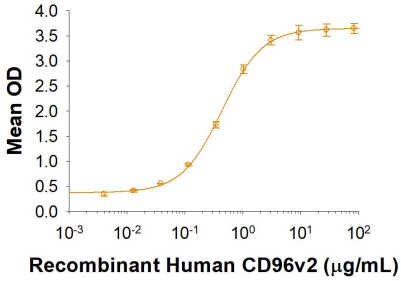
SDS-PAGE	68-77 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Cynomolgus Monkey CD155/PVR Fc Chimera is coated at 5 µg/mL (100 µL/well), the concentration of Recombinant Human CD96v2 Fc Chimera (Catalog # 9556-CD) that produces 50% optimal binding response is 0.25-1.25 µg/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 with Trehalose. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 500 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 °C under sterile conditions after reconstitution.

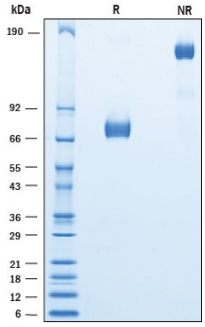
DATA

Binding Activity



Recombinant Cynomolgus CD155/PVR Fc Chimera Protein Binding Activity When Recombinant Cynomolgus Monkey CD155/PVR Fc Chimera (Catalog # 10058-CD) is coated at 5 µg/mL, 100 µL/well, Recombinant Human CD96v2 Fc Chimera (Catalog # Catalog # 9556-CD) binds with an ED_{50} of 0.25-1.25 µg/mL.

SDS-PAGE



Recombinant Cynomolgus CD155/PVR Fc Chimera Protein SDS-PAGE 2 µg/lane of Recombinant Cynomolgus Monkey CD155/PVR Fc Chimera was resolved with SDS-PAGE under reducing (R) and non-reducing (NR) conditions and visualized by Coomassie® Blue staining, showing bands at 68-77 kDa and 140-150 kDa, respectively.

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Recombinant Cynomolgus Monkey CD155/PVR Fc Chimera

Catalog Number: 10058-CD

BACKGROUND

CD155, also known as PVR (poliovirus receptor), Necl-5 (nectin-like molecule-5) and, in rodents, TAGE4 (tumor-associated glycoprotein E4), is a 70-kDa type I transmembrane glycoprotein in the nectin-related family of adhesion proteins within the immunoglobulin superfamily (1, 2). CD155 may play a role in cancer cell invasion and migration, and binds other molecules including Vitronectin, Nectin-3, DNAM-1/CD226, CD96, and TIGIT but does not bind homophilicly (3, 4). The mature human CD155 consists of a 323 amino acid (aa) extracellular domain (ECD) with one N-terminal V-type and two C2-type Ig-like domains, a 24 aa transmembrane segment, and a 50 aa cytoplasmic tail. The sequence of the cynomolgus CD155/PVR was isolated from a cynomolgus monkey cDNA library and aligns with the sequence for *Macaca nemestrina* (XP_011734201.1 aa24-339, T77M, V93T, G223S, R328G). CD155 is up-regulated on endothelial cells by IFN-gamma and is highly expressed on immature thymocytes, lymph node dendritic cells, and tumor cells of epithelial and neuronal origin (1, 2, 5-8). It is preferentially expressed on Th17 cells compared to Th2 cells (9), and its activation promotes the development of Th1 responses (10). On migrating cells, CD155 is concentrated at the leading edge, where it binds basement membrane Vitronectin, recruits Nectin-3-expressing cells, and cooperates with PDGF and Integrin alpha v beta 3 to promote cell migration (1, 3, 11). Enhanced CD155 expression in tumor cells contributes to loss of contact inhibition and increased migration but also allows tumor cell recognition and killing by DNAM-1 or CD96 expressing NK cells (1, 6, 12). Binding of monocyte DNAM-1 to endothelial cell CD155 promotes transendothelial migration (7).

References:

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