Recombinant Cynomolgus Monkey CD200 R1 Fc Chimera

Catalog Number: 9357-CD

DESCRIPTION

Source

Human embryonic kidney cell, HEK293-derived

Human Cynomolgus Monkey CD200 R1 (Ala27-Leu267) Accession # XP_005548208	IEGRMD	Human IgG_1 (Pro100-Lys330)

N-terminus C-terminus

N-terminal Sequence Analysis	Ala27
Structure / Form	Disulfide-linked homodimer
Predicted Molecular Mass	53 kDa

SPECIFICATIONS

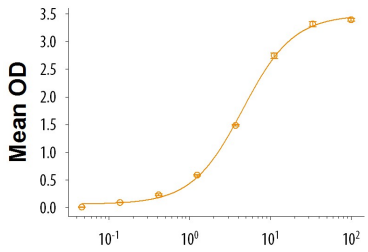
SDS-PAGE	85-102 kDa, reducing conditions
Activity	Measured by its binding ability in a functional ELISA. When Recombinant Cynomolgus Monkey CD200 R1 Fc Chimera is immobilized at 2 µg/mL, 100 µL/well, the concentration of Recombinant Human CD200 Fc Chimera (Catalog # 2724-CD) that produces 50% of the optimal binding response is 1.5-9 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 1 mg/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

Bioactivity



When Recombinant Cynomolgus CD200 R1 Fc Chimera (Catalog # 9357-CD) is immobilized at 2 µg/mL, 100 µL/well, Recombinant Human CD200 Fc Chimera Recombinant Human CD200 Fc Chimera (Catalog # 2724-CD) binds with an ED_{50} of 1.5-9 ng/mL.

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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 China TEL +86 (21) 52380373
Europe | Middle East | Africa TEL +44 (0)1235 529449

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BACKGROUND

CD200 R1, also known as OX-2 receptor, is a 90 kDa transmembrane protein in the immunoglobulin superfamily. CD200 R1 is important in the regulation of myeloid cell activity (1-3). The cynomolgus CD200 R1 cDNA encodes a 241 aa extracellular domain (ECD) and 61 aa cytoplasmic tail. The ECD is composed of one Ig-like V-type domain and one Ig-like C2-type domain (4). Within the ECD, cynomolgus CD200 R1 shares 91%, 54%, and 57% aa sequence identity with human, mouse, and rat CD200 R1, respectively. At least two alternate splice isoforms exist that differ in their cytoplasmic domains. CD200 R1 expression is restricted primarily to mast cells, basophils, macrophages, and dendritic cells (5-7), while its ligand, CD200, is widely distributed (8). Disruption of this receptor-ligand system by knockout of the CD200 gene in mice leads to increased macrophage number and activation and predisposition to autoimmune disorders (9). Association of CD200 with CD200 R1 takes place between their respective N-terminal Ig-like domains (10). CD200 R1 propagates inhibitory signals despite its lacking a cytoplasmic ITIM (immunoreceptor tyrosine-based inhibitory motif) (6, 7, 11, 12).

References:

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