

**DESCRIPTION**

<b>Source</b>	Chinese Hamster Ovary cell line, CHO-derived cynomolgus monkey CD43 protein		
	Cynomolgus Monkey CD43 (Asp20-Thr258) Accession # EHH60309.1	IEGRMD	Human IgG <sub>1</sub> (Pro100-Lys330)
	N-terminus		C-terminus
<b>N-terminal Sequence Analysis</b>	Asp20		
<b>Structure / Form</b>	Disulfide-linked homodimer		
<b>Predicted Molecular Mass</b>	50 kDa		

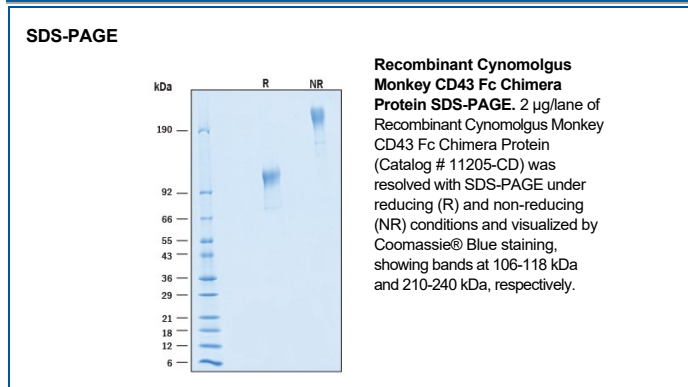
**SPECIFICATIONS**

<b>SDS-PAGE</b>	106-118 kDa, under reducing conditions.
<b>Activity</b>	Measured by its binding ability in a functional ELISA. When Recombinant Cynomolgus Monkey CD-43 Fc Chimera (Catalog # 11205-CD) is immobilized at 1.00 µg/mL (100 µL/well), Recombinant Human Siglec-1 Protein (Catalog # 5197-SL) binds with an ED50 of 1.50-7.50 µg/mL.
<b>Endotoxin Level</b>	<0.10 EU per 1 µg of the protein by the LAL method.
<b>Purity</b>	>95%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.
<b>Formulation</b>	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

**PREPARATION AND STORAGE**

<b>Reconstitution</b>	Reconstitute at 500 µg/mL in PBS.
<b>Shipping</b>	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
<b>Stability &amp; Storage</b>	<p><b>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</b></p> <ul style="list-style-type: none"> <li>• 12 months from date of receipt, -20 to -70 °C as supplied.</li> <li>• 1 month, 2 to 8 °C under sterile conditions after reconstitution.</li> <li>• 3 months, -20 to -70 °C under sterile conditions after reconstitution.</li> </ul>

**DATA**



**BACKGROUND**

CD43, also known as Leukosialin and Sialophorin and Ly-48, is a type I transmembrane sialylated mucin that is expressed on most leukocytes and some tumor cells (1). Notably, the membrane expression of CD43 seems to be a characteristic of leukocytes, while cytoplasmic expression without membrane insertion occurs in endothelium and select epithelia. While CD43 restricts leukocyte adhesion and modulates T cell activation, these activities are context specific (2). CD43 can both induce and protect against apoptosis and can either promote or block cell adhesion (3). CD43 with altered glycosylations are expressed in cancers (4). The extracellular portion of cynomolgus monkey CD43 has a 78.2%, and 93.0% identity to human and rhesus monkeys, respectively. CD43 induced cellular adhesion through the binding to molecules such as E-selectin (5, 6), galectin-1 and galectin-3 (7), siglec-1 (8), M-ficolin (9), integrins (10), cell surface nucleolin (11), and ICAM-1 (intercellular adhesion molecule type 1) (12). During cancer development, CD43 signalling induces the activation of  $\beta$ -catenin, NF- $\kappa$ B (13, 14), NFAT, and AP-1, which are prosurvival transcription factors that can promote tumorigenesis when deregulated (15, 16).

**References:**

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