

DESCRIPTION

Source Mouse myeloma cell line, NS0-derived human CD43 protein
Ser20-Arg253, with a C-terminal 10-His tag
Accession # P16150

N-terminal Sequence Analysis Ser20

Predicted Molecular Mass 25 kDa

SPECIFICATIONS

SDS-PAGE 77-88 kDa, reducing conditions

Activity Measured by its binding ability in a functional ELISA.
Recombinant Human CD43 binds to Recombinant Human Siglec-1/CD169 (Catalog # 5197-SL) with an ED₅₀ of 1.00-10.0 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. See Certificate of Analysis for details.

PREPARATION AND STORAGE

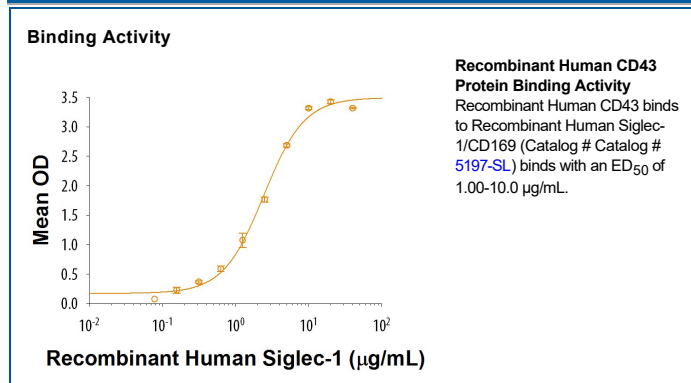
Reconstitution Reconstitute at 250 µg/mL in PBS.

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



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). In human, CD43 is synthesized as a 400 amino acid (aa) precursor that contains a 19 aa signal sequence, a 234 aa extracellular region, a 23 aa TM domain, and a 124 aa cytoplasmic tail. The extracellular region (aa 20-253) has 25 O-linked glycosylation sites and 1 N-linked glycosylation site. Human CD43 extracellular region has less than 60% aa identity to the extracellular regions in rat and mouse.

References:

1. Santamaría, M. *et al.* (1996). *Cancer Res.* **56**:3526.
2. Manjunath, N. *et al.* (1995) *Nature* **377**:535.
3. Brown, T. J. *et al.* (1996) *J. Biol. Chem.* **271**:27686.