

DESCRIPTION

Source Mouse myeloma cell line, NS0-derived
Ala22-Tyr188, with a C-terminal 6-His tag
Accession # P41688

N-terminal Sequence Analysis Ala22

Predicted Molecular Mass 19 kDa

SPECIFICATIONS

SDS-PAGE 28-31 kDa, reducing conditions

Activity Bioassay data are not available.

Endotoxin Level <1.0 EU per 1 μ g of the protein by the LAL method.

Purity >85%, by SDS-PAGE visualized with Silver Staining and quantitative densitometry by Coomassie® Blue Staining.

Formulation Lyophilized from a 0.2 μ m filtered solution in PBS. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 250 μ g/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 not tested



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R&D Systems proteins are almost always sold with a bioassay to indicate activity. However, we recognize that sometimes proteins might be novel, and their bioactivity may not be well understood. In addition, some researchers may wish to use polypeptides to make antibodies. To facilitate the advancement of new science, we now offer our Innovator Series of proteins.

BACKGROUND

CD8 is a dimeric complex made up of two Ig superfamily members (1). The CD8 alpha chain is a type I transmembrane glycoprotein that can dimerize with either itself forming CD8 alpha alpha, or with a 30-35 kDa CD8 beta chain, forming CD8 alpha beta (2). CD8 alpha contains one V-type Ig-like domain in its extracellular region that binds to class I MHC molecules. CD8 alpha beta is a TCR co-receptor, while CD8 alpha alpha promotes T cell survival and differentiation (1, 3). The mature feline CD α consists of a 167 amino acid (aa) extracellular domain (ECD), and runs at ~30 kDa on reduced SDS-PAGE. Within the ECD, feline CD8 alpha shares 58%, 47%, 51%, and 69% amino acid sequence identity with human, mouse, porcine, and canine CD8 alpha, respectively.

References:

1. Laugel, B. *et al.* (2011) *J. Leukoc. Biol.* **90**:1089.
2. Snow, P.M. and C. Terhorst (1983) *J. Biol. Chem.* **258**:14675.
3. Cole, D.K. *et al.* (2012) *Immunology* **137**:139.