

DESCRIPTION

Source *E. coli*-derived
Val27-Val119
Accession # Q9JKC0.1

N-terminal Sequence Analysis Val27

Predicted Molecular Mass 10.3 kDa

SPECIFICATIONS

Activity Measured by its ability to chemoattract BaF3 mouse pro-B cells transfected with mouse CCR3.
The ED₅₀ for this effect is 1-5 ng/mL.

Endotoxin Level <0.01 EU per 1 µg of the protein by the LAL method.

Purity >97%, by SDS-PAGE under reducing conditions and visualized by silver stain.

Formulation Lyophilized from a 0.2 µm filtered solution in PBS with BSA as a carrier protein. See Certificate of Analysis for details.

PREPARATION AND STORAGE

Reconstitution Reconstitute at 25 µg/mL in sterile PBS containing at least 0.1% human or bovine serum albumin.

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.

BACKGROUND

Eotaxin-2, also named myeloid progenitor inhibitory factor (MPIF-2), is a member of the CC chemokine subfamily and is designated CCL24. Eotaxin-2 is constitutively expressed in the jejunum and spleen. It can also be induced in the lung by allergen challenge and IL-4. LPS and IL-4 also differentially regulate the expression of Eotaxin-2 in monocytes and macrophages. Mouse Eotaxin-2 cDNA encodes a 119 amino acid (aa) residue precursor protein that shares approximately 58% aa sequence identity with human Eotaxin-2. Functionally, Eotaxin-2 is most closely related to Eotaxin/CCL11 and Eotaxin-3/CCL26. The three proteins share low sequence homology but have been shown to be potent eosinophil chemoattractants that bind and activate the chemokine receptor CCR3, a receptor that is highly expressed in eosinophils. Eotaxin-2 also has the ability to suppress myeloid cell proliferation, a biological function not shared by Eotaxin. Two amino-terminally-truncated isoforms of mouse Eotaxin-2 have been produced at R&D Systems. The Val27 - Val119 mouse Eotaxin-2 isoform has been shown to be 150-fold more potent than the Ile24 - Val119 isoform as a chemoattractant for mouse BaR/3 cells transfected with mouse CCR3 (1 - 3).

References:

1. Zimmermann, N. *et al.* (2000) *J. Immunol.* **165**:5839.
2. Watanabe, K. *et al.* (2002) *J. Immunol.* **168**:1911.
3. Grzegorzewski, K.J. *et al.* (2001) *Cytokine* **13**:209.