

Eotaxin-3

Test Name: Eotaxin-3

Alternative Name: CCL26

Test Code: 30059

CPT Code: 83520

Clinical Utility: Eotaxin-3 has potent chemotactic activity for eosinophils through the CCR3-Eotaxin-3 interaction. This interaction plays important roles in allergic diseases such as atopic dermatitis and bronchial asthma.

Specimen Requirement:

- 1 mL of Serum
- Blood should be collected and allowed to clot prior to centrifugation
- Specimens should be frozen (-70°C) and shipped via overnight courier with dry ice

Background: Eotaxin-3 (also known as CCL26), is a CC chemokine with potent chemotactic activity for eosinophils. Eotaxin-3 selectively activates the CC chemokine receptor 3 (CCR3). Eotaxin-3 has been implicated in atopic dermatitis (AD) which is a chronic relapsing severe inflammatory skin disease. Patients with AD have been shown to have elevated serum Eotaxin-3 levels in relation to severity of disease and have exhibited decreasing levels of serum Eotaxin-3 following effective AD treatment. In bronchial asthma, upon allergen encounter and cell activation, Eotaxin-3 is increasingly secreted. The Eotaxin-3 actively recruits eosinophils, through the CCR3 binding reaction, into the lung tissue.

Units and Normal Reference Range:

The result is reported in pg/mL. The reference range for a healthy population is <7.8pg/mL. However, it should be noted that these ranges are obtained from a limited population of apparently healthy adults and are not diagnostic thresholds. Viracor-IBT Laboratories has determined the performance characteristics of this test. It has not been approved or cleared by the FDA.

Method:

1. Sandwich ELISA
2. Serum Eotaxin-3 binds to the Eotaxin-3 specific monoclonal antibody pre-coated on the micro plate
3. Bound Eotaxin-3 is detected by an enzyme-linked Eotaxin-3 specific monoclonal antibody
4. Substrate solution is added and color develops in proportion to the amount of Eotaxin-3 bound

Related Tests: The following may be appropriate for some patients.

<u>Test Code</u>	<u>Description</u>
42	ECP
30058	EDN
403068	Complete Atopic Dermatitis Panel

References:

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