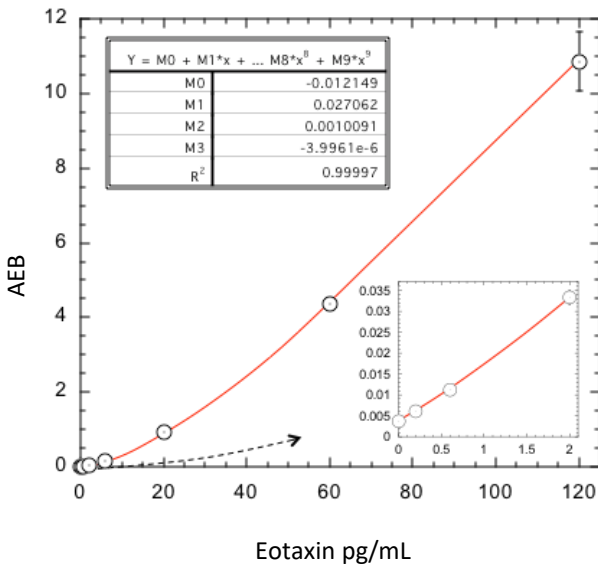## Description

Human Eotaxin is a CC chemokine (β-chemokine) composed of 74 amino acids (molecular weight 8.4 kDa) and is one of a subfamily of eosinophil chemotactic proteins produced by a number of normal cells and cell lines. Eotaxin plays a role in the coordination of recruitment of inflammatory cells, in particular eosinophils, to sites of allergic inflammation. There are three family members of CC chemokines: CCL11 (Eotaxin-1); CCL24 (Eotaxin-2); CCL26 (Eotaxin-3). The chemokine CCL11 has been found in higher concentrations in people suffering from schizophrenia. Additionally, plasma levels of CCL11 have recently been shown to increase with age and with cognitive deficits and hippocampal neurogenesis.

Calibration Curve: Cubic fit parameters are depicted.

Eotaxin pg/mL

Lower Limit of Quantification (LLOQ): Triplicate measurements of serially diluted calibrator were read back on the calibration curve over 1 reagent lot on 1 instrument (5 runs total).

Limit of Detection (LOD): Calculated as 2.5 standard deviations from the mean of background signal read back on each calibration curve over 1 reagent lot on 1 instrument (10 runs total).

Sample Dose CV Profile: Triplicate measurements of diluted serum samples assayed over multiple runs (43 measurements). LLOQ determined as the concentration at which %CV exceeds 20% according to the power equation fit to the data.
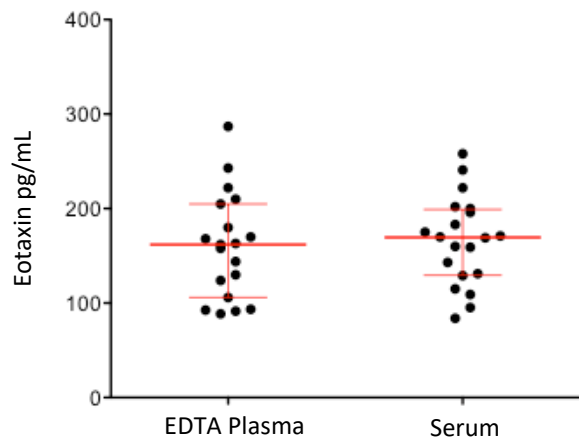

Eotaxin pg/mL
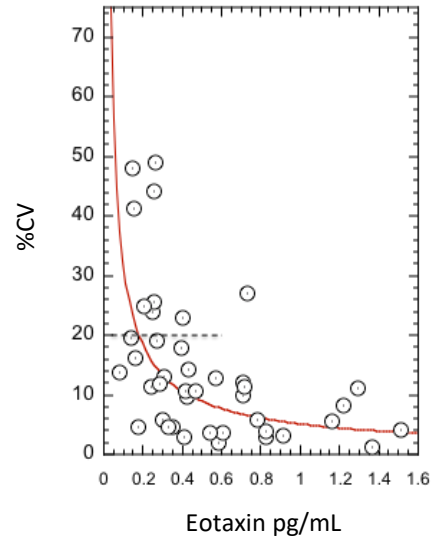
LLOQ	**0.165 pg/mL** pooled CV 18.1% mean recovery 97.7%
LOD	**0.044 pg/mL** SD 0.025 pg/mL
Dynamic range (serum and plasma)	0–1000 pg/mL
Diluted Sample volume*	100 µL per measurement
Tests per kit	96

*See Kit Instruction for details

Endogenous Sample Reading: Healthy donor matched EDTA plasma (n=19) and serum (n=20) were measured. Error bars depict mean and SEM.

Sample Type	Median Eotaxin pg/mL	% Above LOD
Serum	170	100%
Plasma	162	100%

Precision: Four samples consisting of a serum and a plasma-based panel and two Eotaxin controls were assayed in replicates of three at two separate times per day for five days using a single stored calibration curve and a single lot of reagents. Analysis of variance (fully nested ANOVA) results are summarized in the following table.

Sample	Mean (pg/mL)	Within run CV	Between run CV	Between day CV
Control 1	74.8	8.8%	0.0%	3.9%
Control 2	660	7.9%	7.4%	0.0%
Panel 1	49.6	6.8%	5.7%	0.0%
Panel 2*	99.6	3.3%	2.4%	0.3%

*Plasma

Spike and Recovery: Eotaxin spiked into 2 serum samples and 2 plasma samples at 5 and 50 pg/mL.

Dilution Linearity: Serum diluted 2x serially from MRD (4x) to 64x with Sample Diluent.

Spike and Recovery	**Serum Mean: 104%** Range: 98.6 – 109% **EDTA Plasma Mean: 107%** Range: 102 – 113%
Dilution Linearity (64x)	**Serum Mean: 85.0%** Range: 67.0 - 103% **EDTA Plasma Mean: 91.0%** Range: 74.0 - 108%