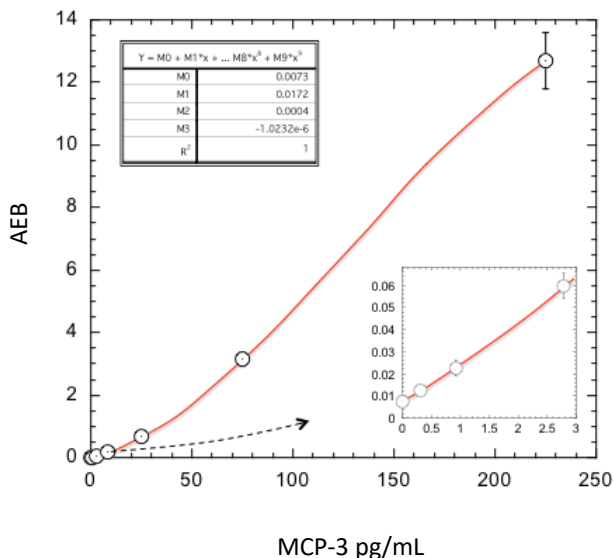


Description

Human monocyte chemotactic protein-3 is a 99 residue, 11 kDa secreted protein which shares 73% sequence similarity to its most structurally and functionally related homolog, MCP-1. MCP-3 displays strong interaction with CC chemokine receptor 2 (CCR2). Chemotactic gradients of MCP-3 are generated in response to localized cell infection which sequesters phagocytes to the site of inflammation and MCP-3 has been well implicated in the process of inflammation in response to presence of allergen. Elevated MCP-3 levels are associated with cytokine stimulated human osteosarcoma (cell line MG-63) and have been documented in patients with inflammatory bowel disease (IBD), ulcerative colitis, and Crohn’s disease. Faulty MCP-3 immune stimulation of non-inflamed lesioned areas of the CNS has been reported in patients with MS.

Calibration Curve: Cubic fit parameters are depicted.



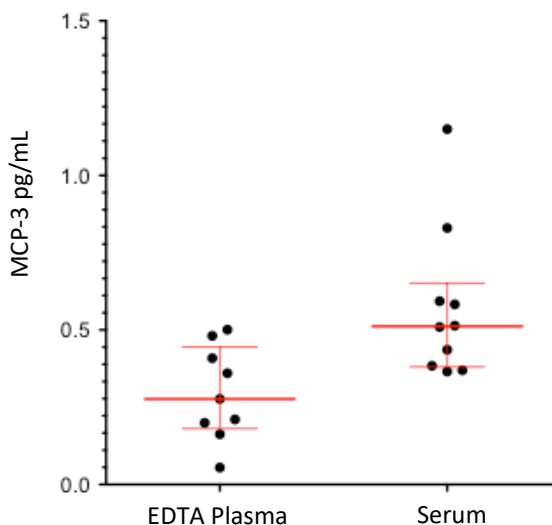
Lower Limit of Quantification (LLOQ): Triplicate measurements of serially diluted calibrator were read back on the calibration curve over 1 reagent lot on 1 instrument (5 runs total).

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 (5 runs total).

| | |
|---|---|
| LLOQ | 0.309 pg/mL pooled CV 15.9% mean recovery 104% |
| LOD | 0.124 pg/mL range 0.0597–0.222 pg/mL |
| Dynamic range (serum and plasma) | 0–450 pg/mL |
| Diluted Sample volume* | 120 µL per measurement |
| Tests per kit | 192 |

*See Kit Instruction for details

Endogenous Sample Reading: Healthy donor matched EDTA plasma (n=9) and serum (n=10) were measured. 1 plasma sample was not detectable. Error bars depict median and interquartile ranges.



| Sample Type | Median MCP-3 pg/mL | % Above LOD |
|-------------|--------------------|-------------|
| EDTA Plasma | 0.445 | 90% |
| Serum | 0.512 | 100% |

Precision: Representative precision was estimated with repeated assay of serum and plasma panels using two instruments and one reagent lot. Within-run and between-run CVs are depicted in the following table. Within-run CVs reflect average CVs across 5 experiments of 3 replicates each.

| Sample | Mean (pg/mL) | Within run CV | Between run CV |
|----------------|--------------|---------------|----------------|
| Serum Panel 1 | 87.5 | 7.3% | 5.1% |
| Serum Panel 2 | 326 | 3.9% | 9.9% |
| Plasma Panel 3 | 6.91 | 10.2% | 11.8% |
| Serum Panel 4 | 5.94 | 9.7% | 9.0% |
| Plasma Panel 5 | 10.9 | 7.3% | 8.7% |

Spike and Recovery: MCP-3 spiked into 6 serum samples at 2 levels.

Dilution Linearity: Spiked, diluted 2x serially from MRD (2x) to 128x with Sample Diluent.

| | |
|-----------------------------------|---|
| Spike and Recovery (Serum) | Mean = 89.9% Range: 46.7–146% |
| Dilution Linearity (128x) | Mean = 118% Range: 92.7–144% |