# Technical Data Sheet

# **Recombinant Human MCP-3**

#### **Product Information**

 Material Number:
 554629

 Size:
 10 μg

 Concentration:
 200 μg/ml

 Reactivity:
 QC Testing: Human

Storage Buffer: Frozen aqueous buffered solution containing BSA.

## Description

Human monocyte chemoattractant protein-3 (MCP-3) is a member of CC chemokine family. It is produced by monocytes, platelets, fibroblasts and osteosarcoma cell line MG-63. The target cells of MCP-2 include monocytes, lymphocytes, basophils, eosinophils, NK cells, dendritic cells and neutrophils. Recombinant human MCP-3 (MN 554629) is supplied as a frozen liquid comprised of 0.22  $\mu$ m sterile-filtered aqueous buffered solution (pH 7.2) and containing 2.0 mg/mL bovine serum albumin, with no preservatives. Recombinant human MCP-3 is > 95% pure as determined by SDS-PAGE, and an absorbance assay based on the Beers-Lambert law. The endotoxin level is  $\leq$  0.1 ng per  $\mu$ g of human MCP-3, as measured in a chromogenic LAL assay.

## **Preparation and Storage**

Store product at -80°C prior to use or for long term storage of stock solutions.

Rapidly thaw and quick-spin product prior to use.

Avoid multiple freeze-thaws of product.

This preparation contains no preservatives, thus it should be handled under aseptic conditions.

#### **Application Notes**

#### Application

ELISA Standard	Routinely Tested
Bioassay	Tested During Development

## **Recommended Assay Procedure:**

Upon initial thawing, recombinant human MCP-3 (MN 554629) should be aliquoted into polypropylene microtubes and frozen at -80°C for future use. Alternatively, the product can be diluted in sterile neutral buffer containing not less than 0.5 - 10 mg/mL carrier protein, such as human or bovine albumin, aliquoted and stored at -80°C. For *in vitro* biological assay use, carrier-protein concentrations of 0.5 - 1 mg/mL are recommended. For use as an ELISA standard, carrier-protein concentrations of 5 - 10 mg/mL are recommended. Failure to add carrier protein or store at indicated temperatures may result in a loss of activity. Carrier proteins should be pre-screened for possible affects in each investigator's experimental system. Carrier protein may have an undesired influence on experimental results due to toxicity, high endotoxin levels or possible blocking activity.

*ELISA Standard:* Recombinant human MCP-3 (MN 554629) can be useful as a quantitative standard for measuring human MCP-3 protein levels using sandwich ELISA with the purified 9H11 antibody (Cat. No. 551228) as a capture antibody and the biotinylated 6H5 antibody (Cat. No. 555034) as the detection antibody. To obtain linear standard curves, investigators may want to consider using doubling dilutions of recombinant human MCP-3 from 1600-12 pg/mL to be included for each ELISA plate.

**Bioassay:** Investigators are advised that the Bioassay application is not routinely tested for this material and are highly encouraged to both titrate this material and include appropriate controls in relevant experiments. An activity range encompassing an ED50 = 10 - 400 ng/mL has previously been reported using THP-1 as indicator cells utilizing a calcium flux assay.

# **Suggested Companion Products**

Catalog Number	Name	Size	Clone
551228	Purified Mouse Anti-Human MCP-3	1.0 mg	9H11
555034	Biotin Mouse Anti-Human MCP-3	0.5 mg	6H5
554058	Avidin-Horseradish Peroxidase (HRP)	1.0 ml	(none)
555214	TMB Substrate Reagent Set	each	(none)

#### **Product Notices**

- 1. Since applications vary, each investigator should titrate the reagent to obtain optimal results.
- 2. Source of all serum proteins is from USDA inspected abattoirs located in the United States.
- 3. Please refer to www.bdbiosciences.com/pharmingen/protocols for technical protocols.

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