Order online now!

www.rockland.com
tech@rockland.com
+1 484.791.3823

Datasheet for 012-001-V80-1000

rRat MIP-1 alpha (CCL3) Protein

Overview

Description:	Rat Macrophage Inflammatory Protein-1 alpha (CCL3) Recombinant Protein - 012-001-V80-1000
Item No.:	012-001-V80-1000
Size:	1 mg
Applications:	SDS-PAGE, Cellular Assay
Origin:	Rat
Expressed in:	E. coli

Product Details

Background:	Macrophage Inflammatory Protein-1 alpha (MIP-1α), also known as CCL3, is produced by macrophages and is thought to induce inflammatory responses, including superoxide production by neutrophils. MIP-1α can exist as a naturally occurring heterodimer with MIP-1β and has been shown to have antiviral activity against HSV-1. Recombinant rat MIP-1α is a non-glycosylated protein, containing 69 amino acids, with a molecular weight of 7.8 kDa.
Synonyms:	LD78α, Macrophage inflammatory protein 1-alpha (MIP-1-alpha)
Species of Origin:	Rat
Expressed in:	E. coli
Type:	Recombinant Protein
Low Endotoxin:	Yes

Target Details

Gene Name:	Ccl3
Purity/Specificity:	Macrophage Inflammatory protein-1 alpha (CCL3) purity was determined to be greater than 95% as determined by analysis by UV-Spectroscopy at 280nm and by reducing and non-reducing SDS-pAGE.
Relevant Links:	• UniProtKB - P50229

Application Details

Tested Applications:	SDS-PAGE
Suggested Applications:	Cellular Assay (Based on references)
Application Note:	Macrophage Inflammatory Protein-1 alpha Recombinant Protein has been tested by SDS-PAGE and biological activity and is suitable as a control for polyclonal or monoclonal anti-Macrophage Inflammatory Protein-1 alpha in immunological assays.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
Other:	Endotoxin Level: Measured by kinetic LAL analysis and is typically ≤ 1 EU/µg protein. Biologic Activity: The activity is determined by the ability to chemoattract human PBMCs at 1-10 ng/mL.

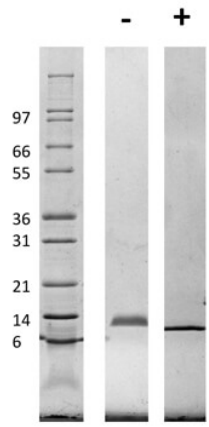
Formulation

Physical State:	Lyophilized
Buffer:	0.1% Trifluoroacetic acid
Preservative:	None
Stabilizer:	None
Reconstitution Volume:	1.0 mL
Reconstitution Buffer:	Restore with deionized water (or equivalent)

Shipping & Handling

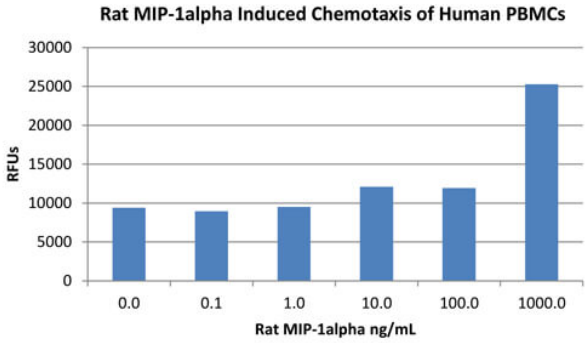
Shipping Condition:	Ambient
Storage Condition:	Store vial at 4° C prior to restoration. Dilute only prior to immediate use. Maintain sterility. This product DOES NOT contain preservative. DO NOT VORTEX. We recommend adding a carrier protein such as HSA or BSA to 0.1% (i.e. 1.0 mg/mL). For best results aliquot contents and freeze at -20° C or colder. Avoid cycles of freezing and thawing. Centrifuge vial before each opening to dislodge contents from the cap and to clarify if contents are not clear after standing at room temperature.
Expiration:	Expiration date is six (6) months from date of receipt.

Images



SDS-PAGE

SDS-PAGE of Rat Macrophage Inflammatory Protein-1 alpha (CCL3) Recombinant Protein. Lane 1: Molecular weight marker. Lane 2: 1 µg Rat MIP-1 in non-reducing conditions (-). Lane 3: 1 µg Rat MIP-1 in reducing conditions (+). Rat MIP-1 alpha has a predicted MW of 7.8 kDa.



SDS-PAGE

Bioactivity of Rat Macrophage Inflammatory Protein-1 alpha (CCL3) Recombinant Protein. Human PBMCs were allowed to migrate to Rat MIP-1 alpha at (0, 0.19, 0.78, 3.1, 12.5 and 200 ng/mL). After 4 hours, cells that migrated were counted using a luminescent substrate and displayed on the bar graph above. Significant increases in migration over basal levels were seen in response to Rat MIP-1 alpha starting at 10 ng/mL. This value is comparable to expected ranges of a chemotactic response of primary human monocytes.

Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.