

Datasheet for KOA0542

Rat MCP-1 - CCL2 ELISA Kit**Overview**

Description:	Rat MCP-1/CCL2 AccuSignal ELISA Kit - KOA0542
Item No.:	KOA0542
Size:	1 Kit
Applications:	ELISA
Reactivity:	Rat
Range:	15.6 pg/ml - 1000 pg/ml

Product Details

Background:	Monocyte chemoattractant protein-1(MCP-1), a member of the chemokine(chemotactic cytokine) family, is a potent monocyte agonist that is upregulated by oxidized lipids. ¹ MCP-1 is also known as CCL2, SCYA2, MCAF. MCAF is a member of family of factors involved in immune and inflammatory responses. The amino acid sequence deduced from the nucleotide sequence reveals the primary structure of the MCAF precursor to be composed of a putative signal peptide sequence of 23 amino acid residues and a mature MCAF sequence of 76 amino acid residues. ² MCP-1 plays a unique and crucial role in the initiation of atherosclerosis and may provide a new therapeutic target in this disorder. ³
Synonyms:	C-C motif chemokine 2, CCL2, CCL2_HUMAN, Chemokine (C-C motif) ligand 2, GDCF-2, HC11, HSMCR30, MCAF, MCP-1, MCP1, MGC9434, Monocyte chemoattractant protein 1, Monocyte chemoattractant protein-1, Monocyte chemotactic and activating factor, Monocyte chemotactic protein 1, Monocyte secretory protein JE, SCYA2, Small inducible cytokine A2 (monocyte chemotactic protein 1, homologous to mouse Sig-je), Small inducible cytokine subfamily A (Cys-Cys), member 2, Small-inducible cytokine A2, SMC-CF
Detection Kit Type:	ELISA Kit
Detection Range:	15.6 pg/ml - 1000 pg/ml
Sensitivity:	<10 pg/ml

Target Details

Gene Name:	CCL2
Reactivity:	Rat

Immunogen:	Expression system for standard: NSO; Immunogen sequence: Q24-N148
Purity/Specificity:	Natural and recombinant rat MCP-1. There is no detectable cross-reactivity with other relevant proteins.
Relevant Links:	<ul style="list-style-type: none">• UniProtKB - P14844• NCBI - NP_113718.1• GenelD - 24770• KOA0542 Protocol

Application Details

Tested Applications:	ELISA
Application Note:	Useful in Sandwich ELISA for Quantitative Detection of Antigen. Aliquot 0.1ml per well of the 1000pg/ml, 500pg/ml, 250pg/ml, 125pg/ml, 62.5pg/ml, 31.2pg/ml, 15.6pg/ml rat MCP-1 standard solutions into the precoated 96-well plate. Add 0.1ml of the sample diluent buffer into the control well (Zero well). Add 0.1ml of each properly diluted sample of rat cell culture supernates or serum to each empty well. It is recommended that each rat MCP-1 standard solution and each sample be measured in duplicate.
Assay Dilutions:	All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.
ELISA:	15.6 pg/ml-1000pg/ml
Other:	DOE: 2-8° C - 03/19/2024 -20° C - 09/17/2024

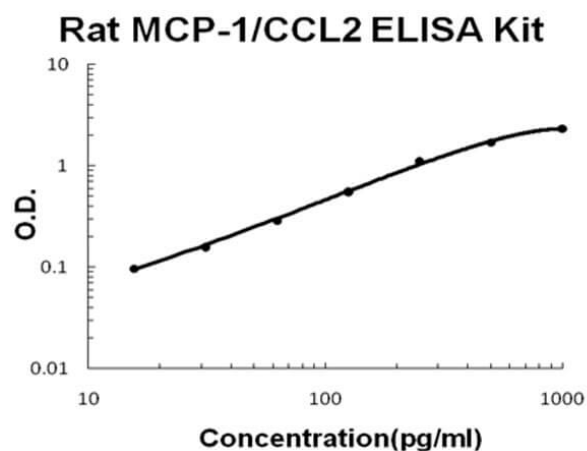
Formulation

Concentration:	1 Kit
-----------------------	-------

Shipping & Handling

Shipping Condition:	Wet Ice
Storage Condition:	Store vials at 4°C prior to opening. Centrifuge product if not completely clear after standing at room temperature. This product is stable for 6 months at 4°C as an undiluted liquid. Dilute only prior to immediate use. For extended storage freeze at -20°C or below for 12 months. Avoid cycles of freezing and thawing.
Expiration:	See kit insert for complete instructions.

Images



ELISA

Rat MCP-1/CCL2 AccuSignal ELISA Kit standard curve. Assay Range: 15.6pg/ml-1000pg/ml. Sensitivity: <10pg/ml.

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.