



Mouse Inflammatory 4-Plex Panel

Technical Data Sheet

Catalog #: LMC0003 Lot #:* 768818

*Note: A letter at the end of the lot number signifies an additional packaging of this same lot.

Intended Use

This kit is comprised of components for the measurement of mouse GM-CSF, IL-1 β , IL-6, and TNF- α in serum, plasma or tissue culture supernatant. The assay may be run alone or in combination with other Singleplex Bead Kits from Invitrogen. These reagents are intended for use in the **Luminex® 100™ or 200™ System** only. **This kit is configured for research use only and is not to be used in diagnostic procedures.**

Reagents Provided

- Ms Inflammatory 4-Plex
1. **Part #:** LM0432 **Description:** Antibody Bead Concentrate (10X) **Lot:** 768821 **Size:** 0.25 mL-100 tests
Form: 0.25 mL 10X bead concentrate solution in storage buffer. Contains 0.05% sodium azide as a preservative.
Storage: **Light-sensitive material.** Store at 2 to 8°C, in the dark, until the expiration date indicated on the kit.
- Ms Inf. 4-Plex
2. **Part #:** BN0432 **Description:** Biotinylated Ab Conc. (10X) **Lot:** 768820 **Size:** 1 mL-100 tests
Form: 1 mL of a 10X stock of Biotinylated Antibody Concentrate in Biotin Diluent. Contains 0.1% sodium azide as preservative. Concentration of antibody is matched to this lot of beads. Do not mix lots of Coated Beads and Detection Antibody.
Storage: Store at 2 to 8°C until the expiration date indicated on the kit.
3. **Part #:** SM039 **Description:** Ms 20-Plex Standard **Lot:** 780776 **Size:** 2 Vials
Form: Lyophilized. The proteins in this standard have been calibrated against the masses of highly purified recombinant proteins, with the respective Invitrogen ELISA kits, and NIBSC calibration standards (if available). Contains 0.1% sodium azide as a preservative.
Storage: Store at 2 to 8°C. Use within 1 hour after reconstitution. Discard remaining reconstituted standard immediately after use.

Concentration of Reconstituted Standards**:

FGF basic (51,400 pg/mL)	GM-CSF (8,300 pg/mL)	IFN- γ (12,700 pg/mL)	IL-1 α (20,900 pg/mL)
IL-1 β (17,000 pg/mL)	IL-2 (8,700 pg/mL)	IL-4 (22,500 pg/mL)	IL-5 (13,800 pg/mL)
IL-6 (15,600 pg/mL)	IL-10 (10,600 pg/mL)	IL-12 (5,000 pg/mL)	IL-13 (16,800 pg/mL)
IL-17 (2,580 pg/mL)	IP-10 (14,000 pg/mL)	KC (140,000 pg/mL)	MCP-1 (18,200 pg/mL)
MIG (2,665 pg/mL)	MIP-1 α (13,000 pg/mL)	TNF- α (12,700 pg/mL)	VEGF (5,700 pg/mL)

****Important note: The concentrations of reconstituted standards are lot-specific. Please verify all concentration values entered in data analysis software.**

Reconstitution of Standard: For a 4-Plex, reconstitute the Ms 20-Plex Standard in **1.0 mL** Assay Diluent, while working with serum samples. For other sample types, such as tissue culture supernatants, reconstitute the Ms 20-Plex Standard in **1.0 mL** of a solution of 50% Assay Diluent + 50% of matrix that matches the sample matrix. Allow standard to rehydrate for at least 10 minutes.

Recommended Starting Concentration for Standard Curve: Upon reconstitution, the starting concentrations of the standard are the values cited above. Make serial 1:3 dilutions in the same diluent used to reconstitute the standard. Use 100 μ L per assay. Refer to User Manual for further information.

For Research Use Only. CAUTION: Not for human or animal therapeutic or diagnostic use.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PILMC0003 (Rev 04/10)

(Page 1 of 2) DCC-10-1322

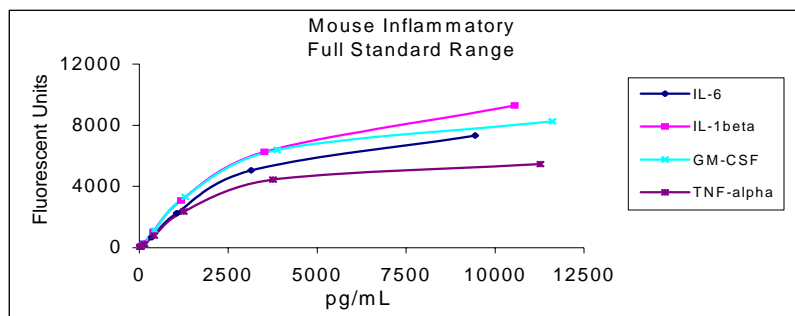
Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

Mouse Inflammatory 4-Plex Panel

Technical Data Sheet

Performance Characteristics

Representative Standard Curve



Cytokine	GM-CSF	IL-1 β	IL-6	TNF- α
Bead Region	27	6	19	50
Sensitivity (pg/mL)	10	10	10	5
Recovery (Serum)	72%	116%	106%	72%
Recovery EDTA Plasma	94%	129%	99%	88%
Recovery Citrate Plasma	79%	Not recommended	77%	77%
Recovery Heparin Plasma	71%	92%	98%	71%
Recovery (TC)	100%	100%	100%	100%
NIBSC calibration	N/A	1 ng=1000 IU	1 ng=100 IU	N/A
Inter assay variation	8.1%	5.2%	9.6%	10.4%
Invitrogen ELISA (Catalog #)	KMC2011	KMC0011	KMC0061	KMC3011
Correlation coefficient	0.99	1.0	N/A	N/A
(Multiplication factor) *	1.0	1.0	N/A	N/A

EQUATION: Bead kit value x *Multiplication Factor = ELISA value

While the diluents included in the kits for determinations of the individual cytokines were developed to optimize quantitation and recovery, the Mouse Inflammatory 4-Plex assay requires the use of a common diluent. In order to determine the impact of the common diluent on quantitation, correlation studies were performed either using stimulated mouse splenocytes in RPMI + 10% FCS or recombinant protein spiked into RPMI + 10% FCS. Data described here were generated with the designated Invitrogen ELISA kit. Correlation of results obtained with the Mouse Inflammatory 4-Plex Panel to one's own system should be determined to arrive at an appropriate multiplication factor.

Specificity: The analytes of the multiplex were assayed individually at 10 ng/mL with the Invitrogen Mouse Inflammatory 4-Plex Panel and all were found to have no cross-reactivity.

Explanation of symbols			
Symbol	Description	Symbol	Description
	Catalogue Number		Batch code
	Research Use Only		In vitro diagnostic medical device
	Use by		Temperature limitation
	Manufacturer		European Community authorised representative
	Without, does not contain		With, contains
	Protect from light		Consult accompanying documents
	Directs the user to consult instructions for use (IFU), accompanying the product.		

By purchasing this Kit, which contains fluorescently labeled microsphere beads authorized by Luminex® Corporation ("Luminex®"), you, the customer, acquire the right under Luminex's patent rights to use this Kit or any portion of this Kit, including without limitation the microsphere beads contained herein, only with Luminex's laser based fluorescent analytical test instrumentation marketed under the name Luminex® 100™ or 200™. This product is covered by one or more of the following U.S. patents: 6,046,807.

For Research Use Only. CAUTION: Not for human or animal therapeutic or diagnostic use.

www.invitrogen.com

Invitrogen Corporation • 542 Flynn Rd • Camarillo • CA 93012 • Tel: 800.955.6288 • E-mail: techsupport@invitrogen.com

PILMC0003 (Rev 04/10)

(Page 2 of 2) DCC-10-1322

Important Licensing Information - These products may be covered by one or more Limited Use Label Licenses (see the Invitrogen Catalog or our website, www.invitrogen.com). By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.