

\*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 monkey IFN- $\gamma$  in serum, plasma, buffered solution or tissue culture supernatant. The assay may be run alone or in combination with other Singleplex Bead Kits from Invitrogen. Buffer reagents needed to complete the reaction are sold separately under Catalog #LHB0001. 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

1. **Part #:** LM153 **Description:** Mk IFN- $\gamma$  Antibody Bead Concentrate (10X) **Lot:** 555967 **Size:** 0.25 mL-100 tests

**Bead Region:** 38

**Form:** 0.25 mL 10x bead concentrate solution in storage buffer. Contains 0.05% sodium azide as a preservative.

**Storage:** Store at 2 to 8°C until the expiration date indicated on the kit.

2. **Part #:** BN153 **Description:** Mk IFN- $\gamma$  Biotinylated Ab Conc. (10X) **Lot:** 555713 **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 - 8°C until the expiration date indicated on the kit.

3. **Part #:** SM058 **Description:** Mk Cytokine 5-Plex Standard **Lot:** 1392404 **Size:** 2 Vials

**Form:** Lyophilized human recombinant proteins. The proteins in this standard have been calibrated against the masses of highly purified human recombinant proteins, with the respective Luminex kits. Contains 0.1% sodium azide as a preservative.

**Storage:** Store at 2 to 8°C. Use within 1 hour after reconstitution. Discard immediately after use.














### Concentration of Reconstituted Standards\*\*:

IFN- $\gamma$ (12,860 pg/mL)	IL-2 (24,810 pg/mL)	IL-4 (7,400 pg/mL)
IL-10 (3,960 pg/mL)	TNF- $\alpha$ (16,070 pg/mL)	

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

**Reconstitution:** Reconstitute with 1.0 mL Assay Diluent when measuring IFN- $\gamma$  in serum or plasma samples. For other sample types, such as tissue culture supernatants, reconstitute the standard in 1.0 mL of a solution consisting of 50% Assay Diluent + 50% of sample matrix. Allow standard to rehydrate for approximately 10 minutes before further dilution.

**Recommended Starting Concentration for Standard Curve:** Upon reconstitution, the starting concentration of standard is the value cited above. Make serial 1:3 dilutions in Assay Diluent (serum/plasma samples) or other appropriate matrix. Use 100  $\mu$ L per assay. If establishing a Multiplex Assay, this same standard can be used to measure the other related cytokines cited above in a Multiplex Assay format. Refer to User Manual included in the Buffer Reagent Kit for further information.

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.		

**For research use only. CAUTION: Not for human or animal therapeutic or diagnostic use.**

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PILPC4031 (Rev 06/10)

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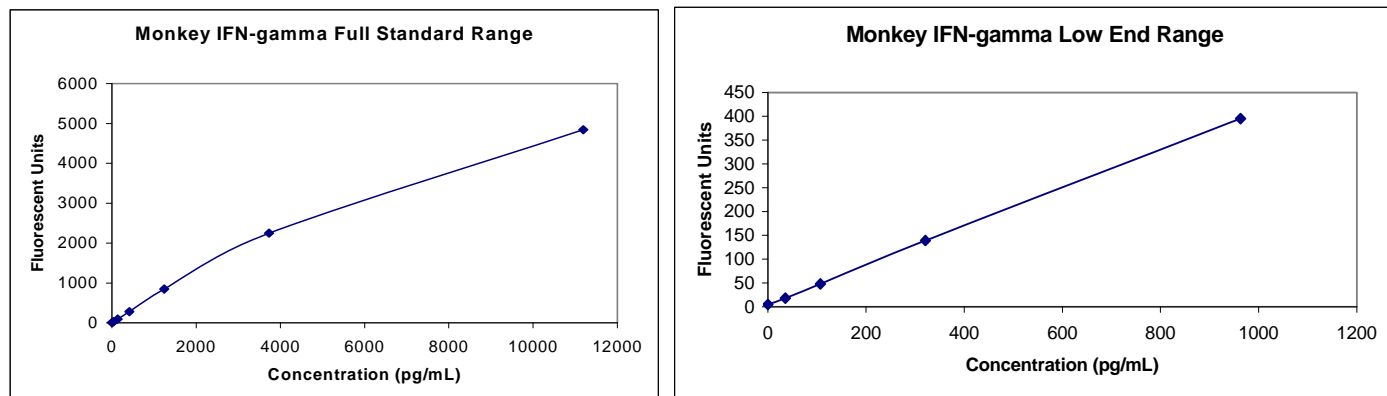
# Monkey IFN- $\gamma$ Singleplex Bead Kit

## Technical Data Sheet

### Performance Characteristics

**Analytical Sensitivity:** The minimum detectable dose of monkey IFN- $\gamma$  <35 pg/mL. This was determined by adding two standard deviations to the mean FI obtained when the zero standard was assayed 32 times.

### Typical Standard Curve



**Specificity:** Buffered solutions of a panel of substances at 5-175.2 ng/mL were assayed with the Invitrogen Monkey IFN- $\gamma$  Singleplex Bead Kit. The following substances were tested and all were found to have no cross-reactivity: Monkey IL-2, IL-4, IL-10, and TNF- $\alpha$ . Human IFN- $\gamma$  has 100% cross-reactivity with monkey IFN- $\gamma$ . Mouse IFN- $\gamma$  has 59% cross-reactivity with monkey IFN- $\gamma$ . Rat IFN- $\gamma$  has 3% cross-reactivity with monkey IFN- $\gamma$ . Swine IFN- $\gamma$  has no cross-reactivity with monkey IFN- $\gamma$ .

### Precision:

	Intra-assay (n=16)	Inter-assay (n=32)
Mean (pg/mL)	2100	2200
SD	102.0	133.5
%CV	4.8%	6.1%

**Linearity:** Monkey serum and tissue culture medium containing 10% fetal calf serum were spiked with monkey IFN- $\gamma$  and serially diluted in *Assay Diluent* and a solution consisting of 50% *Assay Diluent* and 50% tissue culture medium containing 10% fetal calf serum, respectively, over the range of the assay. Linear regression analysis of samples versus the expected concentration yielded a correlation coefficient of 0.99, 0.99, and 0.99 for cynomologous serum, rhesus serum, and tissue culture, respectively.

### Recovery:

Cynomologous monkey serum averaged 130% (range: 113% to 142%).  
Cynomologous citrate plasma averaged 115% (range: 108% to 125%)  
Cynomologous heparin plasma averaged 107% (range: 94% to 121%)  
Cynomologous EDTA plasma not recommended since the average recovery is 134%

Rhesus monkey serum averaged 130% (range: 114% to 134%).  
Rhesus citrate plasma averaged 120% (range: 110% to 132%)  
Rhesus Heparin plasma averaged 83% (range: 62% to 96%)  
Rhesus EDTA plasma not recommended since the average recovery is 134%

Tissue culture medium containing 10% fetal calf serum averaged 102% (range: 89% to 112%).

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.**

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