novex life technologies

Human IL-5 Magnetic Bead Kit

Technical Data Sheet

Pub. No. MAN0014066 **Rev.** 1.02 **Catalog Number:** LHC0051M **Lot Number:** 1670435*

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

Product use

This kit is comprised of components for the measurement of human IL-5 in serum, plasma or tissue culture supernatant. The assay may be run alone or in combination with other magnetic bead kits from Life Technologies. Buffer reagents needed to complete the reaction are sold separately under Cat. no. LHB0001M. These reagents are intended for use in the **Luminex® 200™, FLEXMAP 3D® and the MAGPIX® Systems**.

Reagents provided

Part No.:	LM003M	**Description:**	Hu IL-5 Mag Antibody Bead Conc. (10X)	**Storage:**	**Light-sensitive material**. Store at 2 to 8°C in the dark, until the expiration date indicated on the kit.
Lot No.:	1670459	**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.				

Part No.:	BN003	**Description:**	Hu IL-5 Biotinylated Ab Conc. (10X)	**Storage:**	Store at 2 to 8°C until the expiration date indicated on the kit.
Lot No.:	1670460	**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.				

Part No.:	SM311	**Description:**	Hu 16-Plex Standard	**Storage:**	Store at 2 to 8°C. Use within 1 hour after reconstitution. Discard immediately after use.
Lot No.:	1651350	**Size:**	2 Vials		
Form:	Lyophilized. The proteins in this standard have been calibrated against the masses of highly purified recombinant proteins, with the respective Life Technologies ELISA kits, and NIBSC calibration standards (if available). Contains 0.1% sodium azide as a preservative.				

Concentration of Reconstituted Standard**

Protein	Concentration
IL-1β	7,150 pg/mL
IL-12	7,550 pg/mL
GM-CSF	5,000 pg/mL
IL-2	9,700 pg/mL
IL-10	3,950 pg/mL
IL-13	12,000 pg/mL
IL-5	**8,300 pg/mL**
IL-7	9,900 pg/mL
IFN-α	8,050 pg/mL
IL-15	43,100 pg/mL
IFN-γ	5,200 pg/mL
IL-4	25,200 pg/mL
IL-6	5,750 pg/mL
IL-17	19,650 pg/mL
TNF-α	6,250 pg/mL
IL-8	8,900 pg/mL

** **IMPORTANT**: The concentrations of reconstituted standard are lot-specific. Verify all concentration values entered in data analysis software.

Reconstitution

Reconstitute with 1 mL Assay Diluent when measuring IL-5 in serum or plasma samples. For other sample types, such as tissue culture supernatants, reconstitute the standard in 1 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. Make serial 1:3 dilutions in Assay Diluent (serum/plasma samples) or other appropriate matrix. Use 100 µL per assay. If establishing a Multiplex Assay, this same standard can be used to measure the other related cytokines cited in a Multiplex Assay format. Refer to the user manual included in the buffer reagent kit for further information.

Performance characteristics

Protein Target	Bead No.	Starting Standard Conc. (pg/mL)*	Analytical Sensitivity (pg/mL)**	Recovery					NIBSC Calibration	NIBSC Prep. No.	Mult. Factor† (ELISA Cat. no.)	Inter-assay CV***
				Serum	EDTA Plasma	Citrate Plasma	Heparin Plasma	TC***				
IL-5	34	8,300	< 0.1	✓	✓	✓	✓	✓	1 µg = 200 U	90/586	**4.4 (KHC0051)**	7.5%

* **IMPORTANT**: The concentrations of reconstituted standard are lot-specific. Verify all concentration values entered in data analysis software.

** Analytical sensitivity was determined by adding two standard deviations to the mean FI obtained when the zero standard was assayed 16 times.

*** Analysis performed during product development and with first lots produced.

Legend: 70-130% recovery (✓), 50-69% recovery (−), 131-150% recovery (+) and <50% or >150% recovery (NR - Not recommended)

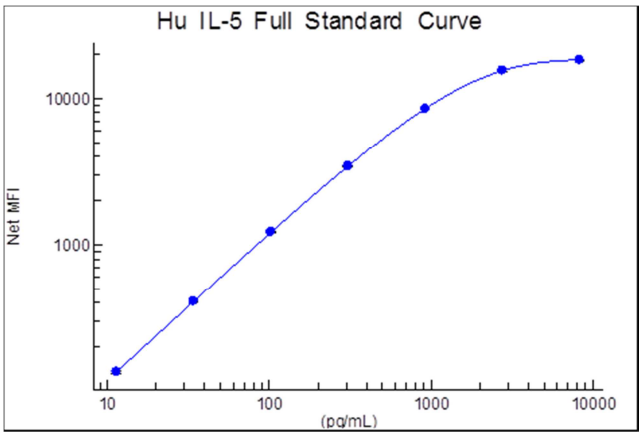
Specificity

Buffered solutions of a panel of substances at 10 or 20 ng/mL were assayed with the Human IL-5 Magnetic Bead Kit. The following substances were tested and all were found to have no cross-reactivity: human IL-2, IL-4, IL-10, IFN-γ; mouse IL-2, IL-4, IL-5, IL-10, IFN-γ.

Equation

(Human IL-5 Magnetic Bead Kit value) × (†Multiplication Factor) = ELISA value

Typical standard curve



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Explanation of symbols

Symbol	Description	Symbol	Description	Symbol	Description
	Manufacturer	REF	Catalog number	LOT	Batch code
	Use by		Temperature limitation		
	Consult instructions for use		Caution, consult accompanying documents		

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