



Human A β 40 Antibody Bead Kit

INFORMATION SHEET

Catalog #: LHB3481 Description: Human A β 40 Lot: * 459593

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

Intended Use

This reagent set comprises the analyte specific components for the measurement of human A β 40 in CSF and tissue culture media. The assay may be run alone or in combination with other Neuroscience Antibody Bead Kits from Invitrogen. Buffer reagents needed to complete the reaction are sold separately under Catalog # LNB0001. 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. Antibody Bead Concentrate (10x):

Catalog #: LM132 Description: Ms x Hu A β Beads Lot: 459597 Size: 0.25 mL-100 tests

Bead Region: 60

Form: 0.25 mL 10x bead concentrate solution in storage buffer. Contains 0.02% ProClin®300 as a preservative.

Storage: **Light-sensitive material.** Store at 2 - 8°C until the expiration date indicated on the kit.

Recommended Dilution: Use 25 μ L of diluted bead solution per assay. Mix 1 part 10x bead concentrate with 9 parts Working Wash Solution.

Note: Beads for Human A β 40 cannot be mixed with beads for Human A β 42 (cat. # LHB3441). Each of these analytes must be measured separately.

2. Detector Antibody Concentrate (10x):

Catalog #: DN132 Description: Rbt x Hu A β 40 Lot: 459598 Size: 0.5 mL-100 tests

Form: 0.5 mL of a 10x stock of Detector Antibody Concentrate in Detector Antibody Diluent. Contains 3.3 mM thymol as a preservative. Concentration of antibody is matched to this lot of beads. Do not mix lots of Coated Beads and Detector Antibody.

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

Recommended Dilution: Use 50 μ L of diluted Detector Antibody solution per assay. For a single analyte assay, mix 1 part 10x Detector Antibody concentrate with 9 parts Detector Antibody Diluent. To develop a multiplexed assay that includes other Neuroscience Antibody Bead Kits, mix equal volumes of the different 10x Detector Antibody Concentrates, then dilute the antibodies with Detector Antibody Diluent to yield a 1x Detector Antibody mixture.

3. Hu A β 40 Standard (2 vials):

Catalog #: SM044 Description: Hu A β 40 Standard Lot: 1373368 Size: Single use

Form: Lyophilized. This human A β 40 standard was calibrated against the Invitrogen A β 40 ELISA kit (cat. # KHB3481/KHB3482).

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

4. Carbonate Buffer (1 vial):

Catalog #: BF001 Description: Carbonate Buffer Lot: 352649 Size: 4 mL

Form: 4 mL of 50 mM carbonate buffer, pH 9.4. Contains 0.01% sodium azide as a preservative.

Storage: Store at 2 - 8°C.

Standard Reconstitution:

1. Pipette 0.85 mL carbonate buffer into one A β 40 Standard vial to yield a 100 ng/mL solution. Allow the standard to rehydrate for 10 minutes at room temperature.
2. When working with CSF samples, dilute to 5,000 pg/mL with Assay Diluent (0.05 mL of 100 ng/mL solution + 0.95 mL of Assay Diluent). When working with tissue culture medium samples, dilute to 5,000 pg/mL with a mixture of 50% Assay Diluent and 50% tissue culture medium (0.05 mL of 100 ng/mL solution + 0.95 mL of 50/50 mix). Allow standard to sit for approximately 10 minutes before further dilution. Make serial 1:2 dilutions in Assay Diluent (CSF samples) or mixture of 50% Assay Diluent and 50% tissue culture medium (tissue culture medium samples).

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

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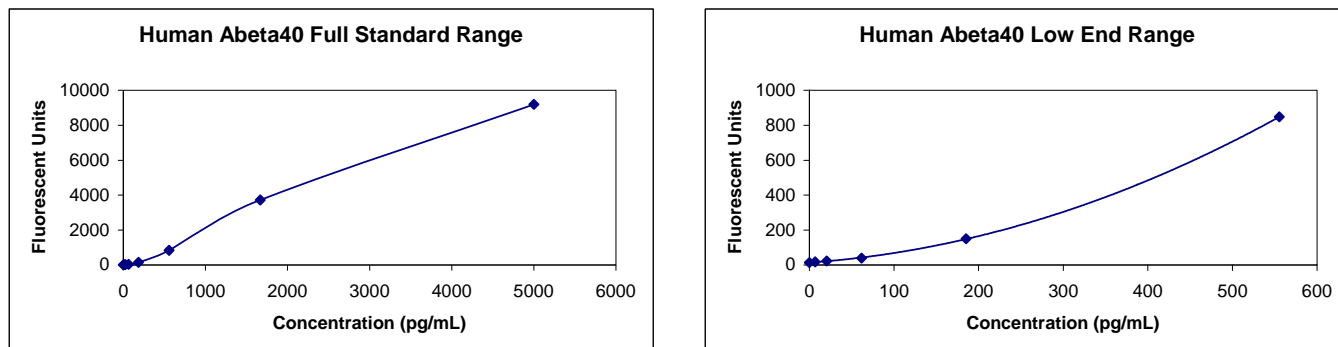
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Each well designated for standard receives 50 µL of 1x Detector Antibody followed by 50 µL standard. Each well designated for sample receives 50 µL of 1x Detector Antibody followed by 25 µL Assay Diluent and 25 µL sample. See the Product Insert included in the Neuroscience Buffer Reagent Kit (LNB0001) for further information.

Performance Characteristics

Analytical Sensitivity: The minimum detectable dose of Human Aβ40 is <22 pg/mL. This was determined by adding two standard deviations to the mean MFI obtained when the zero standard was assayed 30 times.

Typical Standard Curve



Species Reactivity: This Human Aβ40 Antibody Bead Kit is specific for human Aβ40. It does not cross-react with rat or mouse. Other species were not tested.

Specificity: Buffered solutions of a panel of substances with concentrations ranging between 1 and 30 ng/mL were assayed with the Invitrogen Human Aβ40 Antibody Bead Kit. The following substances were tested and found to have no cross-reactivity: human Aβ42, Tau, IL-1α, IL-1β, IL-2, IL-3, IL-4, IL-5, IL-6, IL-7, IL-8, IL-10, IFN-α, IFN-γ, GM-CSF, TNF-α, IL-12, IL-13, IL-15, IL-17, MCP-1, MIP-1α, MIP-1β, Eotaxin, RANTES, IP-10, MIG.

Precision:

	Intra-assay (n=16)	Inter-assay (n=32)
Mean (pg/mL)	465.43	464.66
SD	16.62	20.57
%CV	3.57%	4.43%

Linearity: CSF (diluted 1:2 in Assay Diluent) and tissue culture medium (RPMI containing 5% FBS) were spiked with human Aβ40 standard and serially diluted in Assay Diluent or 50/50 Assay Diluent plus tissue culture medium over the range of the assay. Linear regression analysis of samples versus the expected concentration yielded a correlation coefficient of 0.99 for CSF and a correlation coefficient of 1.0 for tissue culture medium.

Recovery:

CSF (diluted 1:2 in Assay Diluent) averaged 85.0%.
Tissue culture medium containing 5% FBS averaged 92.6%.

Correlation to ELISA:

A correlation coefficient of 0.99 was calculated when values for CSF, obtained with the Hu Aβ40 Antibody Bead Kit, were compared to the Invitrogen ELISA for Hu Aβ40 (cat. # KHB3481/KHB3482). Hu Aβ40 Antibody Bead Kit (pg/mL) x 0.68 = Hu Aβ40 ELISA (pg/mL). Correlation of results obtained with the Hu Aβ40 Antibody Bead Kit to one's own system should be determined to arrive at an appropriate multiplication factor.

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: 6,046,8

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