XL Magnetic Luminex® Performance Assay Human PDGF-AB/BB Kit

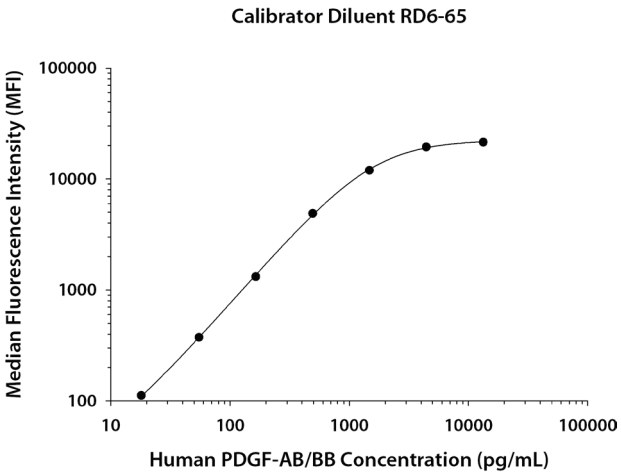
Catalog Number: LUXLM9454

Pack Size: 100 Tests

Recommended Sample Types	• Cell culture supernates, serum, and platelet-poor plasma
Microparticle Region	• Region-67
Components	• Human PDGF-AB/BB Magnetic Microparticles (Part 898837) is supplied as a 100X concentrated stock (0.075 mL) with preservatives.
Other Supplies Required	• Magnetic Luminex® Performance Assay Human XL Discovery Base Kit (R&D Systems®, Catalog # LUXLM000).
Storage	• Store the unopened kit at 2-8 °C. Do not use past the expiration date on the label. • **Avoid freezing microparticles.** • **Protect microparticles from light.**
Instructions for Use	• Refer to the base kit insert for the Magnetic Luminex® Performance Assay procedure.

TYPICAL DATA

This human PDGF-AB/BB standard curve is provided only for demonstration. A standard curve must be generated each time an assay is run, utilizing values from the Standard Value Card included in the base kit.



Standard	(pg/mL)	MFI	Average	Corrected
Blank	0	21 22	22	—
1	13,290	21,399 21,495	21,447	21,425
2	4430	19,294 19,588	19,441	19,419
3	1477	11,978 11,998	11,988	11,966
4	493	4786 5028	4907	4885
5	164	1332 1343	1338	1316
6	55	396 397	396	374
7	18	133 134	134	112

PERFORMANCE CHARACTERISTICS

All data were collected with assays run as a multiplex.

Sensitivity - The Minimum Detectable Dose (MDD) was determined by adding two standard deviations to the mean MFI of twenty zero standard replicates and calculating the corresponding concentration.

Six assays were evaluated, and the MDD of human PDGF-AB/BB ranged from 0.122-0.721 pg/mL. The mean MDD was 0.230 pg/mL.

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PRECISION

Intra-assay Precision (precision within an assay) - Two samples of known concentration were tested twenty times on one plate to assess intra-assay precision.

Inter-assay Precision (precision between assays) - Two samples of known concentration were tested in twenty-five separate assays to assess inter-assay precision.

	Intra-Assay Precision		Inter-Assay Precision	
Sample	1	2	1	2
n	20	20	25	25
Mean (pg/mL)	70.7	2593	63.1	2517
Standard deviation	1.28	78.5	10.4	346
CV (%)	1.8	3.0	16.5	13.7

RECOVERY

Samples containing and/or spiked with human PDGF-AB/BB were evaluated for recovery. Due to significant endogenous levels observed, serum recovery was not evaluated.

Sample Type	Average % Recovery	Range
Cell culture supernates	122	108-148%
Platelet-poor EDTA plasma	101	72-119%
Platelet-poor heparin plasma	101	69-125%

LINEARITY

Samples containing and/or spiked with human PDGF-AB/BB were serially diluted to evaluate assay linearity.

				Platelet-poor	
		Cell culture supernates	Serum	EDTA plasma	Heparin plasma
1:2	Average % of Expected	90	92	95	106
	Range (%)	85-96	87-101	81-106	100-117
1:4	Average % of Expected	92	95	100	111
	Range (%)	88-97	87-102	85-116	105-123
1:8	Average % of Expected	91	97	97	106
	Range (%)	88-94	88-104	83-115	98-122

SPECIFICITY

Note: *Refer to the base kit insert for a complete list of analytes tested for cross-reactivity and interference.*

This assay recognizes natural and recombinant human PDGF-AB/BB.

TECHNICAL HINTS

- Protect the microparticles and streptavidin-PE from light at all times.
- Refer to the Base Kit Standard Value Card for reconstitution volume and values of the reconstituted standard.
- Diluted microparticles cannot be stored. Make a fresh dilution of microparticles each time the assay is run.
- The use of a magnetic device made to accommodate a microplate is necessary for washing.
- Discrepancies may exist in values obtained for the same analyte utilizing different technologies.

Magnetic Luminex® Performance Assays afford the user the benefit of multi-analyte analysis of biomarkers in a complex sample. For each sample type, a single, multipurpose diluent is used to optimize recovery, linearity, and reproducibility. Such a multipurpose diluent may not optimize any single analyte to the same degree that a unique diluent selected for analysis of that analyte can optimize conditions. Therefore, some performance characteristics may be more variable than those for assays designed specifically for single analyte analysis.