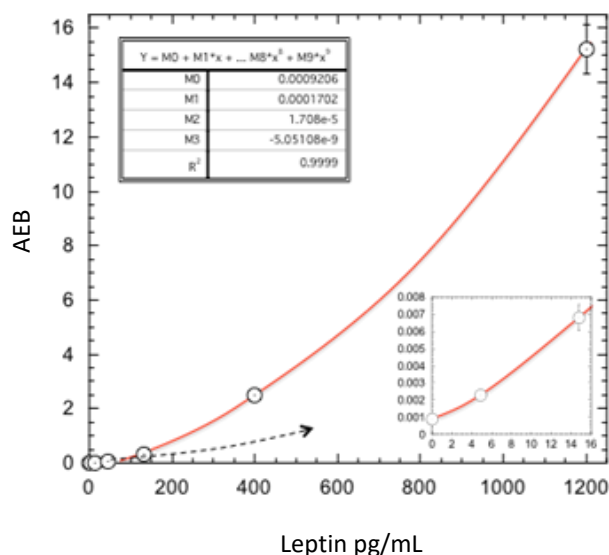


Description

Leptin is a 16-kDa adipokine encoded by the obese gene. It helps maintain normal body weight and energy homeostasis. Leptin expression is regulated by insulin, glucocorticoids and leptin itself. Levels of circulating leptin are proportional to body fat mass and fluctuate based on changes in nutritional states. Leptin binds to and activates the long form of leptin receptors (LepRb) expressed in many regions of the brain. The hypothalamus is the main Leptin target and mediates its anti-obesity action. Leptin also has other physiologic and pathologic functions resembling those of cytokines which include the regulation of hematopoiesis, angiogenesis, wound healing, inflammation, and immune responses.

Calibration Curve: Cubic curve fit parameters are depicted.



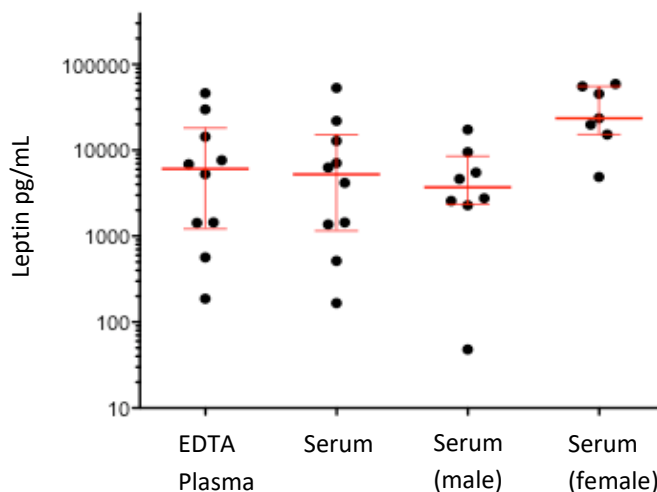
Lower Limit of Quantification (LLOQ): Triplicate measurements of serially diluted calibrator were read back on the calibration curve over 1 reagent lot across 3 instruments (5 runs total).

Limit of Detection (LOD): Calculated as 2.5 standard deviations from the mean of background signal read back on each calibration curve over 1 reagent lot across 3 instruments (5 runs total).

LLOQ	4.94 pg/mL pooled CV 6.3% mean recovery 101%
LOD	2.46 pg/mL range 0.0961–4.20 pg/mL
Dynamic range (serum and plasma)	0–60 ng/mL
Diluted Sample volume*	100 µL per measurement
Tests per kit	192

*See Kit Instruction for details

Endogenous Sample Reading: Healthy donor matched EDTA plasma (n=10) and serum (n=10) were measured. Gender-specific serum samples (n = 8 males, n = 7 females) were from a different sample set. Error bars depict median and interquartile ranges.



Sample Type	Median Leptin pg/mL	% Above LOD
EDTA Plasma	6,083	100%
Serum	5,251	100%
Male Serum	3,708	100%
Female Serum	23,603	100%

Precision: Representative precision was estimated with repeated assay of serum panels using three instruments and one reagent lot. Within-run and between-run CVs are depicted in the following table. Within-run CVs reflect average CVs across 5 experiments of 3 replicates each.

Sample	Mean (pg/mL)	Within run CV	Between run CV
Serum Panel 1	4,342	2.3%	3.5%
Serum Panel 2	13,547	1.7%	13.9%
Serum Panel 3	39,937	2.5%	2.8%

Dilution Linearity: 2 serum samples diluted 2x serially from MRD (50x) to 1600x with Sample Diluent.

Dilution Linearity (1600x)	Mean = 100.1% Range: 77.2–107.9%
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