MSD® Human Resistin Kit

For quantitative determination in human serum and plasma



Alzheimer's Disease BioProcess Cardiac Cell Signaling Clinical Immunology Cytokines Growth Factors Hypoxia Immunogenicity Inflammation

Metabolic

Oncology Toxicology Vascular

Catalog Numbers

Human Resistin Kit		
Kit Size	Catalog #	
1 plate	K151FND-1	
5 plates	K151FND-2	
25 plates	K151FND-4	

Ordering Information

MSD Customer Service Phone: 1-301-947-2085 Fax: 1-301-990-2776 Email: CustomerService@ mesoscale.com

Scientific Support

Phone: 1-301-947-2025 Email: ScientificSupport@ mesoscale.com

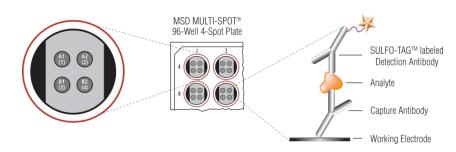
Company Address

MESO SCALE DISCOVERY® A division of Meso Scale Diagnostics, LLC. 1601 Research Boulevard Rockville, MD 20850-3173 USA

www.mesoscale.com®

For Research Use Only. Not for use in diagnostic procedures. 1. Resistin

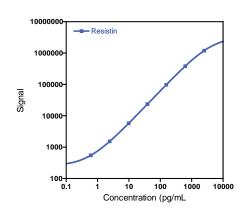
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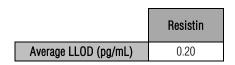


Resistin, or FIZZ-2, is a cysteine-rich plasma protein that belongs to a family of polypeptides called resistin-like molecules. Although classified as an adipokine, in humans resistin is mainly produced by blood-derived leukocytes and mononuclear cells, both within and outside the adipose tissue. The physiological role and pathophysiologic importance of resistin in humans are unclear. Resistin antagonizes the effects of insulin on glucose metabolism in liver and skeletal muscle, interacts with and reinforces inflammatory pathways, and may promote endothelial cell activation. Increased resistin levels have been associated with obesity, insulin resistance, metabolic syndrome, type 2 diabetes, and increased cardiovascular risk. The MSD Human Resistin assay is available on 96-well, 4-spot plates. Representative data from the assay is presented below.

Assay Sensitivity

The following standard curve illustrates the dynamic range of the Human Resistin assay.





The lower limit of detection (LLOD) is a calculated concentration based on a signal 2.5 standard deviations above the background (zero calibrator blank).

MSD Advantage

- > Multiplexing: Multiple analytes can be measured in one well using typical sample volumes of 25 μL or less without compromising speed or performance
- Large dynamic range: Linear range of up to five logs enables the measurement of native levels of biomarkers in normal and diseased samples without multiple dilutions
- > Minimal background: The stimulation mechanism (electricity) is decoupled from the response (light signal), minimizing matrix interference
- > Simple protocols: Only labels bound near the electrode surface are excited, enabling assays with fewer washes
- > Flexibility: Labels are stable, non-radioactive, and conveniently conjugated to biological molecules
- > High sensitivity and precision: Multiple rounds of label excitation and emission enhance light levels and improve sensitivity

For a complete list of products, please visit our website at www.mesoscale.com.





MSD Metabolic Assays

Tested Samples

Normal human serum, EDTA plasma, and heparin plasma samples were diluted 20-fold and tested with the Human Resistin Kit. Median and range of concentrations for each sample set are displayed below. Concentrations are corrected for sample dilution.

Sample Type	Statistic	Resistin
Serum (N=5)	Median (pg/mL)	2952
	Range (pg/mL)	730–3142
	Samples in Quantitative Range	5
EDTA	Median (pg/mL)	2737
Plasma	Range (pg/mL)	1129–4472
(N=5)	Samples in Quantitative Range	5
Heparin	Median (pg/mL)	3281
Plasma	Range (pg/mL)	2469-4491
(N=5)	Samples in Quantitative Range	5

References

- 1. McTernan PG, et al. Resistin. Curr Opin Lipidol. 2006;17:170-5.
- 2. Steppan CM, et al. The current biology of resistin. J Intern Med. 2004;255:439-447.
- 3. Patel L, et al. Resistin is expressed in human macrophages and directly regulated by PPAR gamma activators. Biochem Biophys Res Commun. 2003;300:472-6.
- 4. Savage DB, et al. Resistin/Fizz3 expression in relation to obesity and peroxisome proliferator-activated receptor-gamma action in humans. Diabetes. 2001;50:2199-2202.
- 5. Silha JV, et al. Plasma resistin, adiponectin and leptin levels in lean and obese subjects: correlations with insulin resistance. Eur J Endocrinol. 2003;149:331-335.
- Norata GD, et al. Plasma resistin levels correlate with determinants of the metabolic syndrome. Eur J Endocrinol. 2007;156:279-284.
- 7. Zhang JL, et al. Serum resistin level in essential hypertension patients with different glucose tolerance. Diabet Med. 2003;20:828-831.

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