

Cytokines

Human Recombinant Resistin

Resistin



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Catalog #100-1294

100 µg

Product Description

Resistin, also known as adipocyte-specific secretory factor (ADSF), belongs to the resistin-like molecule (RELM) family which is characterized by a highly conserved, cysteine-rich C terminus (Pine et al.). Resistin is produced by adipocytes in mice and has been implicated in insulin resistance, reducing glucose tolerance, and insulin sensitivity in vivo (Li et al.). In humans, resistin is expressed predominantly in leukocytes, modulating inflammation in various diseases (Jamaluddin et al.; Jang et al., 2015; Mantula et al.). Resistin has been shown to modulate various cellular responses, such as promoting neutrophil extracellular trap (NET) formation (Jiang et al.) and regulating anti-inflammatory signaling pathways through toll-like receptor 4 (TLR4) (Jang et al., 2017). Studies also show that resistin facilitates vascular endothelial growth factor (VEGF)-A-dependent angiogenesis in human chondrosarcoma cells, highlighting it as a promising target for chondrosarcoma angiogenesis (Chen et al.).

Product Information

Alternative Names:	ADSF, FIZZ3
Accession Number:	Q9HD89 (Ser17-Pro108) was expressed with an additional Met.
Amino Acid Sequence:	MSSKTLCSME EAINERIQEV AGSLIFRAIS SIGLECQSVT SRGLATCPR GFAVTGCTCG SACGSWDVRA ETTCHCQCAG MDWTGARCCR VQP
Predicted Molecular Mass:	9.9 kDa monomer; 19.7 kDa dimer
Species:	Human
Formulation:	Lyophilized from a sterile-filtered aqueous solution containing 0.1% trifluoroacetic acid (TFA).
Source:	<i>E. coli</i>

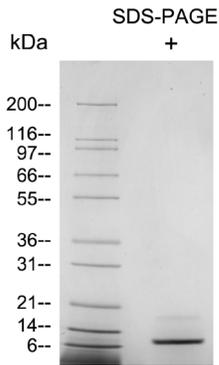
Specifications

Activity:	Not available
Purity:	≥ 95%
Endotoxin Level:	Measured by kinetic Limulus amoebocyte lysate (LAL) analysis and is ≤ 1 EU/µg protein.

Preparation and Storage

Storage:	Store at -20 to -80°C.
Stability:	Stable as supplied for 12 months from date of receipt.
Preparation:	Centrifuge vial before opening. Reconstitute the product in sterile water to at least 0.1 mg/mL by pipetting the solution down the sides of the vial. Do not vortex. As a general guide, do not store at 2 - 8°C for more than 1 month or at -80°C for more than 3 months. Avoid repeated freeze-thaw cycles.

Data



Human Recombinant Resistin was resolved with SDS-PAGE under reducing (+) conditions and visualized by Coomassie Blue staining. Human Recombinant Resistin has a predicted molecular mass of 9.9 kDa (monomer) or 19.7 kDa (dimer).

Related Products

For a complete list of cytokines, as well as related products available from STEMCELL Technologies, visit www.stemcell.com/cytokines, or contact us at techsupport@stemcell.com.

References

- Chen S-S et al. (2019) Resistin facilitates VEGF-A-dependent angiogenesis by inhibiting miR-16-5p in human chondrosarcoma cells. *Cell Death Dis* 10(31).
- Jamaluddin MS et al. (2012) Resistin: functional roles and therapeutic considerations for cardiovascular disease. *Br J Pharmacol* 165(3): 622–32.
- Jang JC et al. (2015) Macrophage-derived human resistin is induced in multiple helminth infections and promotes inflammatory monocytes and increased parasite burden. *PLOS Pathog* 11(1): e1004579.
- Jang JC et al. (2017) Human resistin protects against endotoxic shock by blocking LPS–TLR4 interaction. *Proc Natl Acad Sci* 114(48): E10399–408.
- Jiang S et al. (2014) Human resistin promotes neutrophil proinflammatory activation and neutrophil extracellular trap formation and increases severity of acute lung injury. *J Immunol* 192(10): 4795–803.
- Li F-P et al. (2009) Effects of resistin expression on glucose metabolism and hepatic insulin resistance. *Endocrine* 35(2): 243–51.
- Mantula PS et al. (2018) High plasma resistin associates with severe acute kidney injury in Puumala hantavirus infection. *PLOS ONE* 13(12): e0208017.
- Pine GM et al. (2018) Here, there and everywhere: Resistin-like molecules in infection, inflammation, and metabolic disorders. *Cytokine* 110: 442–51.

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