

Product Information

Anti-Visfatin (C- terminal)

produced in rabbit, affinity isolated antibody

Catalog Number **V9139**

Product Description

Anti-Visfatin (C- terminal) is produced in rabbit using as immunogen a synthetic peptide corresponding to amino acids 331-349 of human visfatin (GeneID: 10135), conjugated to KLH. This sequence is identical in mouse and rat visfatin. The antibody is affinity-purified using the immunizing peptide immobilized on agarose.

Anti-Visfatin (C- terminal) recognizes human and rat visfatin. Applications include the detection of visfatin by immunoblotting (~50 kDa). Staining of the visfatin band by immunoblotting is specifically inhibited with the immunizing peptide.

Visfatin (also known as pre-B colony enhancing factor 1, PBEF1, nicotinamide phosphoribosyltransferase, NAMPT), is a highly conserved protein involved in the regulation of cellular metabolism and energy homeostasis. Visfatin was isolated as an adipocytokine, expressed by fat cells that exert a variety of insulin mimetic effects, including enhancing glucose uptake and increasing triglyceride synthesis.¹ Visfatin has been shown to activate its target cells by binding to the insulin receptor at a site distinct from insulin, and its expression level in plasma increases during the development of obesity. Visfatin functions as a nicotinamide phosphoribosyl transferase (NAMPT), where it can regulate cellular levels of NAD and energy homeostasis.^{1,2} Visfatin can induce the cellular expression of inflammatory cytokines such as TNF- α , IL-1 β , IL-7 and IL-6.^{3,4} Visfatin has been implicated in the development of obesity-associated insulin resistance, diabetes mellitus and different human diseases that share an inflammatory basis such as rheumatoid arthritis, lung injury and tumorigenesis.^{5,6} Visfatin is expressed in large amounts in the bone marrow, liver tissue and muscle and is also present in heart placenta, lung and kidney tissues.⁶

Reagent

Supplied as a solution in 0.01 M phosphate buffered saline, pH 7.4, containing 15 mM sodium azide as a preservative.

Antibody concentration: ~1.5 mg/mL

Precautions and Disclaimer

This product is for R&D use only, not for drug, household, or other uses. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Storage/Stability

For continuous use, store at 2-8 °C for up to one month. For extended storage, freeze in working aliquots. Repeated freezing and thawing, or storage in "frost-free" freezers, is not recommended. If slight turbidity occurs upon prolonged storage, clarify the solution by centrifugation before use. Working dilutions should be discarded if not used within 12 hours.

Product Profile

Immunoblotting: a working concentration of 1-2 μ g/mL is recommended using a A549 cell lysate and 2-4 μ g/mL using a rat lung extract (S1 fraction).

Note: In order to obtain the best results using various techniques and preparations, we recommend determining the optimal working dilutions by titration.

References

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3. Samal, B., et al., *Mol. Cell. Biol.*, **14**, 1431-1437 (1994).
4. Tilg, H., and Moschen, A.R., *Nature Rev. Immunol.*, **6**, 772-783 (2006)
5. Kim, S.R., et al., *Biochem. Biophys. Res. Commun.*, **357**, 150-156 (2007).
6. Luk, T., et al., *J. Leukoc. Biol.*, **83**, 804-816 (2008).

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