

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human PBEF/Visfatin in direct ELISAs and Western blots. In direct ELISAs, approximately 50% cross-reactivity with recombinant rat PBEF is observed, and approximately 25% cross-reactivity with recombinant mouse PBEF is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	<i>E. coli</i> -derived recombinant human PBEF/Visfatin isoform 1 Pro27-His491 Accession # P43490
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied as a 0.2 µm filtered solution in PBS.

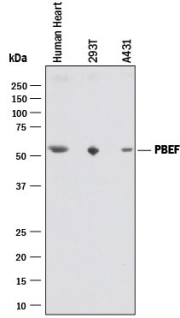
APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. *General Protocols* are available in the *Technical Information* section on our website.

	Recommended Concentration	Sample
Western Blot	0.2 µg/mL	See Below
Intracellular Staining by Flow Cytometry	0.25 µg/10 ⁶ cells	See Below
Simple Western	2 µg/mL	See Below
CyTOF-ready	Ready to be labeled using established conjugation methods. No BSA or other carrier proteins that could interfere with conjugation.	

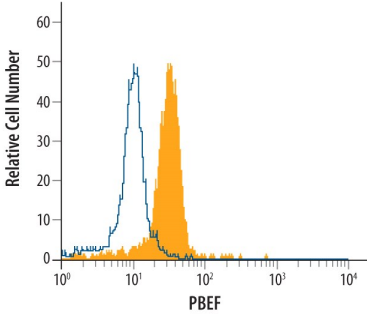
DATA

Western Blot



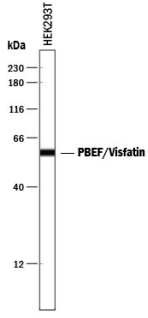
Detection of Human PBEF/Visfatin by Western Blot. Western blot shows lysates of human heart tissue, 293T human embryonic kidney cell line, and A431 human epithelial carcinoma cell line. PVDF membrane was probed with 0.2 µg/mL of Sheep Anti-Human PBEF/Visfatin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4335) followed by HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). A specific band was detected for PBEF/Visfatin at approximately 52 kDa (as indicated). This experiment was conducted under reducing conditions and using Immunoblot Buffer Group 1.

Intracellular Staining by Flow Cytometry




Detection of PBEF/Visfatin in PMA-treated Human PBMCs by Flow Cytometry. Human peripheral blood mononuclear cells were treated for 24 hours with 50 ng/mL PMA then stained with Sheep Anti-Human PBEF/Visfatin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4335, filled histogram) or control antibody (Catalog # 5-001-A, open histogram), followed by NorthernLights™ 637-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # NL011). To facilitate intracellular staining, cells were fixed with paraformaldehyde and permeabilized with saponin.

Simple Western



Detection of Human PBEF/Visfatin by Simple Western™. Simple Western lane view shows lysates of HEK293T human embryonic kidney cell line, loaded at 0.2 mg/mL. A specific band was detected for PBEF/Visfatin at approximately 58 kDa (as indicated) using 2 µg/mL of Sheep Anti-Human PBEF/Visfatin Antigen Affinity-purified Polyclonal Antibody (Catalog # AF4335) followed by 1:50 dilution of HRP-conjugated Anti-Sheep IgG Secondary Antibody (Catalog # HAF016). This experiment was conducted under reducing conditions and using the 12-230 kDa separation system.



PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	<p>Use a manual defrost freezer and avoid repeated freeze-thaw cycles.</p> <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

PBEF (pre-B cell colony-enhancing factor; also visfatin and nicotinamide phosphoribosyltransferase) is a 52 kDa member of the NAPRTase family of molecules. It functions both intracellularly and extracellularly, where it participates in NAD synthesis and insulin receptor activation, respectively. Human PBEF is 491 amino acids in length and contains no signal sequence. There is at least one alternative splice form that shows a 5 aa substitution for the C-terminal 128 amino acids (aa 364-491). Over aa 27-491, human PBEF shares 96%, 97%, and 96% aa identity with mouse, porcine, and canine PBEF, respectively.