

Factor B (N-14): sc-34888

BACKGROUND

The complement component proteins, C3, C4 and C5, are potent anaphylatoxins that are released during complement activation. Binding of these proteins to their respective G protein-coupled receptors, C3 α R, C1R and C5 α R, induces proinflammatory events, such as cellular degranulation, smooth muscle contraction, arachidonic acid metabolism, cytokine release, leukocyte activation and cellular chemotaxis. Complement Factor B, also designated Properdin Factor B or PBF2, is part of the alternate pathway of the complement system and is cleaved by Factor D into two fragments: B α and B β . B β combines with complement Factor 3 β to produce the C3 or C5 convertase and plays a role in the differentiation and proliferation of preactivated B lymphocytes, lysis of erythrocytes, stimulation of lymphocyte blastogenesis and rapid spreading of peripheral blood monocytes. B α is important in inhibiting the proliferation of preactivated B lymphocytes. Adipsin, also designated complement Factor D, is a serine protease that cleaves complement Factor B and may be involved in obesity. Factor H controls the function of the alternative complement pathway. FHR-1 (complement Factor H related protein 1) may play a role in lipid metabolism.

CHROMOSOMAL LOCATION

Genetic locus: CFB (human) mapping to 6p21.33; Cfg (mouse) mapping to 17 B1.

SOURCE

Factor B (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the N-terminus of Factor B of human origin.

PRODUCT

Each vial contains 200 μ g IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-34888 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Factor B (N-14) is recommended for detection of Complement Factor B Sushi 1 Fragment of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Factor B siRNA (h): sc-44510, Factor B siRNA (m): sc-44916, Factor B shRNA Plasmid (h): sc-44510-SH, Factor B shRNA Plasmid (m): sc-44916-SH, Factor B shRNA (h) Lentiviral Particles: sc-44510-V and Factor B shRNA (m) Lentiviral Particles: sc-44916-V.

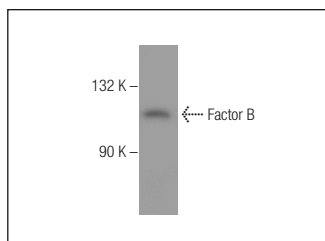
Molecular Weight of Factor B: 100 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or human plasma extract: sc-364374.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



Factor B (N-14): sc-34888. Western blot analysis of Factor B in human plasma.

SELECT PRODUCT CITATIONS

- Chen, M., et al. 2010. Inhibition of the alternative pathway of complement activation reduces inflammation in experimental autoimmune uveoretinitis. *Eur. J. Immunol.* 40: 2870-2881.
- Xu, H., et al. 2011. Cataract surgery induces retinal pro-inflammatory gene expression and protein secretion. *Invest. Ophthalmol. Vis. Sci.* 52: 249-255.

STORAGE

Store at 4° C, **DO NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

MONOS
Satisfaction
Guaranteed

Try **Factor B (D22/3): sc-47681** or **Factor B (F-7): sc-271636**, our highly recommended monoclonal alternatives to Factor B (N-14).