

C5L2 (N-20): sc-30350

BACKGROUND

Anaphylatoxin, a chemotactic and inflammatory peptide, is a receptor for C5a anaphylatoxin chemotactic receptor (C5L2), also designated G protein-coupled receptor 77. C5L2 is an integral membrane protein that belongs to the G protein-coupled receptor 1 family. C5L2 weakly couples to G_i-mediated signaling pathways and is widely expressed in the hippocampus, hypothalamus, pons, frontal cortex and liver. It is coexpressed with the C5a receptor (C5AR) on polymorphonuclear neutrophils and may modulate the activity of C5AR. The function of the C5a receptors, particularly that of C5L2, is still unclear. Research suggests that C5L2 may be required for the *in vitro* release of high mobility group box 1 protein (HMGB1).

REFERENCES

1. Cain, S.A. and Monk, P.N. 2002. The orphan receptor C5L2 has high affinity binding sites for complement fragments C5a and C5a des-Arg⁷⁴. *J. Biol. Chem.* 277:7165-7169
2. Okinaga, S., et al. 2003. C5L2, a nonsignaling C5A binding protein. *Biochemistry* 42: 9406-9415.
3. Otto, M., et al. 2004. C5a mutants are potent antagonists of the C5a receptor (CD88) and of C5L2: position 69 is the locus that determines agonism or antagonism. *J. Biol. Chem.* 279: 142-151.
4. Gavriluk, V., et al. 2005. Identification of complement 5a-like receptor (C5L2) from astrocytes: characterization of anti-inflammatory properties. *J. Neurochem.* 92: 1140-1149.
5. Huber-Lang, M., et al. 2005. Changes in the novel orphan, C5a receptor (C5L2), during experimental sepsis and sepsis in humans. *J. Immunol.* 174: 1104-1110.
6. Rittirsch, D., et al. 2008. Functional roles for C5a receptors in sepsis. *Nat. Med.* 14:551-557.
7. SWISS-PROT/TrEMBL (Q9P296). World Wide Web URL: <http://www.expasy.ch/sprot/sprot-top.html>

CHROMOSOMAL LOCATION

Genetic locus: GPR77 (human) mapping to 19q13.32.

SOURCE

C5L2 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an extracellular domain of C5L2 of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-30350 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

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

APPLICATIONS

C5L2 (N-20) is recommended for detection of C5L2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg 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 C5L2 siRNA (h): sc-105165, C5L2 shRNA Plasmid (h): sc-105165-SH and C5L2 shRNA (h) Lentiviral Particles: sc-105165-V.

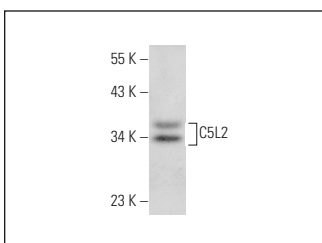
Molecular Weight of C5L2: 36 kDa.

Positive Controls: A549 cell lysate: sc-2413.

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



C5L2 (N-20): sc-30350. Western blot analysis of C5L2 expression in A549 whole cell lysate.

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.