

BRAK (C-14): sc-27346

BACKGROUND

Breast and kidney-expressed chemokine (BRAK) is a highly selective monocyte chemoattractant. The CXC chemokine BRAK, which is ubiquitously expressed in normal tissue extracts, is absent from many tumor cell lines *in vitro*. BRAK, also known as CXCL14, is involved in the generation of tissue macrophages by recruiting extravasated precursors to fibroblasts, which are known to secrete essential cytokines for macrophage development. The gene encoding BRAK is located on human chromosome 5q31.1. This gene belongs to the cytokine family which encodes secreted proteins involved in immunoregulatory and inflammatory processes. The BRAK protein is structurally related to the CXC (Cys-X-Cys) subfamily of cytokines characterized by two cysteines separated by a single amino acid.

REFERENCES

- Hromas, R., et al. 1999. Cloning of BRAK, a novel divergent CXC chemokine preferentially expressed in normal versus malignant cells. *Biochem. Biophys. Res. Commun.* 255: 703-706.
- Frederick, M.J., et al. 2000. *In vivo* expression of the novel CXC chemokine BRAK in normal and cancerous human tissue. *Am. J. Pathol.* 156: 1937-1950.
- Kurth, I., et al. 2001. Monocyte selectivity and tissue localization suggests a role for breast and kidney-expressed chemokine (BRAK) in macrophage development. *J. Exp. Med.* 194: 855-861.
- Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 604186. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
- Mitsui, G., et al. 2003. Kinetic profiles of sequential gene expressions for chemokines in mice with contact hypersensitivity. *Immunol. Lett.* 86: 191-197.
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CHROMOSOMAL LOCATION

Genetic locus: CXCL14 (human) mapping to 5q31.1; Cxcl14 (mouse) mapping to 13 B1.

SOURCE

BRAK (C-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of BRAK 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-27346 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

BRAK (C-14) is recommended for detection of BRAK of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

BRAK (C-14) is also recommended for detection of BRAK in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for BRAK siRNA (h): sc-43638, BRAK siRNA (m): sc-141736, BRAK shRNA Plasmid (h): sc-43638-SH, BRAK shRNA Plasmid (m): sc-141736-SH, BRAK shRNA (h) Lentiviral Particles: sc-43638-V and BRAK shRNA (m) Lentiviral Particles: sc-141736-V.

Molecular Weight (predicted) of BRAK: 13 kDa.

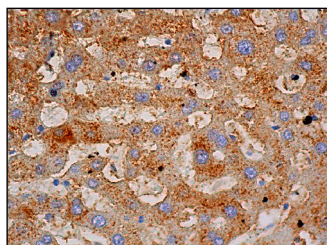
Molecular Weight (observed) of BRAK: 20 kDa.

Positive Controls: human skeletal muscle extract: sc-363776.

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) 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. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



BRAK (C-14): sc-27346. Immunoperoxidase staining of formalin fixed, paraffin-embedded human liver tissue showing cytoplasmic staining of hepatocytes.

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.