# Blr1 (C-3): sc-373775



The Power to Question

### **BACKGROUND**

Burkitt's lymphoma receptor 1 (BIr1) is a lymphocyte specific chemokine receptor expressed at low levels in secondary lymphoid tissues and in defined structures of the cerebellum. The G protein-coupled receptor has significant homology to other chemokine receptors. Stimulation of BIr1 by its ligand, B-lymphocyte chemo-attractant (BLC) results in an influx of calcium into the cell and the chemotaxis of the cell. BIr1 is required for B-cell migration into splenic and Peyer's patch follicles. BLC expression in Peyer's patches is highest in germinal centers, where B cells undergo somatic mutation and affinity maturation.

## **CHROMOSOMAL LOCATION**

Genetic locus: CXCR5 (human) mapping to 11q23.3; Cxcr5 (mouse) mapping to 9 A5.2.

### **SOURCE**

Blr1 (C-3) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 347-372 at the C-terminus of Blr1 of human origin.

#### **PRODUCT**

Each vial contains 200  $\mu g \; lgG_{2b}$  kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blr1 (C-3) is available conjugated to agarose (sc-373775 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to either phycoerythrin (sc-373775 PE), fluorescein (sc-373775 FITC), Alexa Fluor® 488 (sc-373775 AF488), Alexa Fluor® 546 (sc-373775 AF546), Alexa Fluor® 594 (sc-373775 AF594) or Alexa Fluor® 647 (sc-373775 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-373775 AF680) or Alexa Fluor® 790 (sc-373775 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-373775 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

# **APPLICATIONS**

BIr1 (C-3) is recommended for detection of BIr1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 BIr1 siRNA (h): sc-29812, BIr1 siRNA (m): sc-29813, BIr1 shRNA Plasmid (h): sc-29812-SH, BIr1 shRNA Plasmid (m): sc-29813-SH, BIr1 shRNA (h) Lentiviral Particles: sc-29812-V and BIr1 shRNA (m) Lentiviral Particles: sc-29813-V.

Molecular Weight (predicted) of Blr1 long isoform: 42 kDa.

Molecular Weight (predicted) of Blr1 short isoform: 37 kDa.

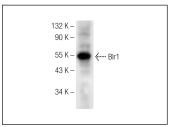
Molecular Weight (observed) of Blr1: 56 kDa.

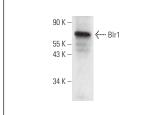
Positive Control: NAMALWA cell lysate: sc-2234 or WEHI-231 whole cell lysate: sc-2213.

### **RECOMMENDED SUPPORT REAGENTS**

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-lgG $\kappa$  BP-HRP: sc-516102 or m-lgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>TM</sup> Molecular Weight Standards: sc-2035, UltraCruz\* Blocking Reagent: sc-516214 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 m-lgG $\kappa$  BP-FITC: sc-516140 or m-lgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz\* Mounting Medium: sc-24941 or UltraCruz\* Hard-set Mounting Medium: sc-359850.

#### DATA





BIr1 (C-3): sc-373775. Western blot analysis of BIr1 expression in NAMALWA whole cell lysate.

BIr1 (C-3): sc-373775. Western blot analysis of BIr1 expression in WEHI-231 whole cell lysate.

# **SELECT PRODUCT CITATIONS**

- Ahmad, S.F., et al. 2019. The Stat3 inhibitor, S3I-201, downregulates lymphocyte activation markers, chemokine receptors, and inflammatory cytokines in the BTBR T+ ltpr3<sup>tf</sup>/J mouse model of autism. Brain Res. Bull. 152: 27-34.
- Zhao, J., et al. 2022. Activation of CXCL13/CXCR5 axis aggravates experimental autoimmune cystitis and interstitial cystitis/bladder pain syndrome. Biochem. Pharmacol. 200: 115047.

#### 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 for detailed protocols and support products.

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