# SANTA CRUZ BIOTECHNOLOGY, INC.

# Bcr (H-300): sc-20707



# BACKGROUND

The Bcr gene, mapping on chromosome 22, was initially identified on the basis of its fusion with the c-Abl proto-oncogene on chromosome 9 resulting in the generation of the Philadelphia chromosome in 90-95% of patients with chronic myelogenous leukemia (CML). The Bcr gene encodes for the Breakpoint cluster region protein (Bcr). A consequence of this translocation is the generation of a Bcr/c-Abl mRNA encoding an activated c-Abl protein kinase. The Bcr gene has been shown to encode a GTPase-activating protein (GAP) specific for the Ras-related GTP-binding protein, Rac 1 p21. While it has been speculated that the Bcr protein may also stimulate Rac 2 p21 GTPase activity, it has no effect on Ras p21 or Rho p21 GTPases. It is of interest that the GAP domain of Bcr maps outside of the region that remains on chromosome 22 (Philadelphia chromosome) in CML.

# CHROMOSOMAL LOCATION

Genetic locus: BCR (human) mapping to 22q11.23, ABL1 (human) mapping to 9q34.12; Bcr (mouse) mapping to 10 B5.3, Abl1 (mouse) mapping to 2 B.

## SOURCE

Bcr (H-300) is a rabbit polyclonal antibody raised against amino acids 1-300 (deletion 17-219) mapping at the N-terminus of Bcr of human origin.

# PRODUCT

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

# **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.

#### APPLICATIONS

Bcr (H-300) is recommended for detection of Bcr and Bcr/Abl fusion proteins of mouse, rat and 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 Bcr siRNA (h): sc-29795, Bcr siRNA (m): sc-29796, Bcr shRNA Plasmid (h): sc-29795-SH, Bcr shRNA Plasmid (m): sc-29796-SH, Bcr shRNA (h) Lentiviral Particles: sc-29795-V and Bcr shRNA (m) Lentiviral Particles: sc-29796-V.

Molecular Weight of Bcr: 160 kDa.

Molecular Weight of Bcr in Philadelphia-positive leukemia: 130 kDa.

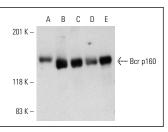
Molecular Weight of Bcr/Abl fusion proteins: 190/210 kDa.

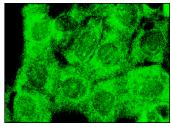
Positive Controls: CTLL-2 cell lysate: sc-2242, HeLa whole cell lysate: sc-2200 or BJAB whole cell lysate: sc-2207.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA





Bcr (H-300): sc-20707. Western blot analysis of Bcr expression in CTLL-2 (A), WEHI-231 (B), BJAB (C), HeLa (D) and A-431 (E) whole cell lysates. Bcr (H-300): sc-20707. Immunofluorescence staining of methanol-fixed A-431 cells showing nuclear and cytoplasmic localization.

#### PROTOCOLS

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

MONOS Satisfation Guaranteed Try **Bcr (H-300)** or **Bcr (A-1): sc-365728**, our highly recommended monoclonal aternatives to Bcr (H-300). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **Bcr (H-300)**.