SANTA CRUZ BIOTECHNOLOGY, INC.

ABR (Q-17): sc-54558



BACKGROUND

ABR, or active breakpoint cluster region-related protein, contains a Dbl-homology (DH) domain, a Pleckstrin homology domain and a C-terminal Rho GAP domain specific for Rac. Its DH domain is only moderately active as a guanine exchange factor (GEF). ABR is highly related to Bcr (breakpoint cluster region), with 68% amino acid sequence identity. It is expressed at high levels in the central nervous system and in hematopoietic tissue. ABR, together with Bcr, is essential for normal astrocyte function, vestibular morphogenesis and Rac-mediated pathway regulation. The loss of functional ABR in murine macrophages does not result in any obvious mutant phenotype. A mild response occurs with the loss of Bcr. However, the loss of both proteins results in damage to multiple organs and possible death. This suggests that Bcr and ABR may compensate for each other.

CHROMOSOMAL LOCATION

Genetic locus: ABR (human) mapping to 17p13.3; Abr (mouse) mapping to 11 B5.

SOURCE

ABR (Q-17) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of ABR of human origin.

PRODUCT

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

Blocking peptide available for competition studies, sc-54558 P, (100 μ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, **D0 NOT FREEZE**. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

APPLICATIONS

ABR (Q-17) is recommended for detection of ABR 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).

ABR (Q-17) is also recommended for detection of ABR in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for ABR siRNA (h): sc-61930, ABR siRNA (m): sc-61931, ABR shRNA Plasmid (h): sc-61930-SH, ABR shRNA Plasmid (m): sc-61931-SH, ABR shRNA (h) Lentiviral Particles: sc-61930-V and ABR shRNA (m) Lentiviral Particles: sc-61931-V.

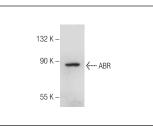
Molecular Weight of ABR: 98 kDa.

Positive Controls: A-431 whole cell lysate: sc-2201 or rat brain extract: sc-2392.

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



ABR (Q-17): sc-54558. Western blot analysis of ABR expression in A-431 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.

MONOS Satisfation Guaranteed

Try **ABR (24): sc-135821**, our highly recommended monoclonal alternative to ABR (Q-17).