

Bonzo (M-110): sc-292376

BACKGROUND

Bonzo (also designated STRL33.3) and BOB (brother of Bonzo; also designated GRP15) are seven-transmembrane, G protein-coupled receptors that are closely related to chemokine receptor family members. In conjunction with CD4, several chemokine receptors are known to serve as receptors for HIV-1 entry into cells. Bonzo and BOB are utilized by simian immunodeficiency virus (SIV), HIV-2 and M-tropic HIV-1 for cell entry. Bonzo and BOB are both expressed in lymphoid tissues, and BOB is also expressed in colon.

REFERENCES

1. Heiber, M., Marchese, A., Nguyen, T., Heng, H.H., George, S.R. and O'Dowd, B.F. 1996. A novel human gene encoding a G protein-coupled receptor (GPR15) is located on chromosome 3. *Genomics* 32: 462-465.
2. Deng, H., Liu, R., Ellmeier, W., Choe, S., Unutmaz, D., Burkhart, M., Di Marzio, P., Marmon, S., Sutton, R.E. and Hill, C.M. 1996. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 381: 661-666.
3. Dragic, T., Litwin, V., Allaway, G.P., Martin, S.R., Huang, Y., Nagashima, K.A., Cayanan, C., Maddon, P.J., Koup, R.A. and Moore, J.P. 1996. HIV-1 entry into CD4⁺ cells is mediated by the chemokine receptor C-C CKR5. *Nature* 381: 667-673.
4. Choe, H., Farzan, M., Sun, Y., Sullivan, N., Rollins, B., Ponath, P.D., Wu, L., Mackay, C.R., LaRosa, G. and Newman, W. 1996. The β -chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. *Cell* 85: 1135-1148.
5. Doranz, B.J., Rucker, J., Yi, Y., Smyth, R.J., Samson, M., Peiper, S.C., Parmentier, M., Collman, R.G. and Doms, R.W. 1996. A dual-tropic primary HIV-1 isolate that uses fusin and the β -chemokine receptors CKR-5, CKR-3, and CKR-2 as fusion cofactors. *Cell* 85: 1149-1158.
6. Feng, Y., Broder, C.C., Kennedy, P.E. and Berger, E.A. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. *Science* 272: 872-877.
7. Alkhatib, G., Combadiere, C., Broder, C.C., Feng, Y., Kennedy, P.E., Murphy, P.M. and Berger, E.A. 1996. C-C CKR5: a RANTES, MIP-1 α , MIP-1 β receptor as a fusion cofactor for macrophage-tropic HIV-1. *Science* 272: 1955-1958.
8. Deng, H.K., Unutmaz, D., Kewalramani, V.N. and Littman, D.R. 1997. Expression cloning of new receptors used by simian and human immunodeficiency viruses. *Nature* 388: 296-300.

CHROMOSOMAL LOCATION

Genetic locus: CXCR6 (human) mapping to 3p21.31; Cxcr6 (mouse) mapping to 9 F4.

SOURCE

Bonzo (M-110) is a rabbit polyclonal antibody raised against amino acids 97-206 mapping within an internal region of Bonzo of mouse origin.

PRODUCT

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

APPLICATIONS

Bonzo (M-110) is recommended for detection of Bonzo of mouse, rat and, to a lesser extent, 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).

Suitable for use as control antibody for Bonzo siRNA (h): sc-39895, Bonzo siRNA (m): sc-39896, Bonzo shRNA Plasmid (h): sc-39895-SH, Bonzo shRNA Plasmid (m): sc-39896-SH, Bonzo shRNA (h) Lentiviral Particles: sc-39895-V and Bonzo shRNA (m) Lentiviral Particles: sc-39896-V.

Molecular Weight of Bonzo: 39 kDa.

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (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 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™ Mounting Medium: sc-24941.

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 or our catalog for detailed protocols and support products.