



Bonzo (43F09): sc-73753

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-CR5. *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 β 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-CR5: 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 (mouse) mapping to 9 F4.

SOURCE

Bonzo (43F09) is a rat monoclonal antibody raised against CHO cells transfected with Bonzo of mouse origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and protein stabilizer.

APPLICATIONS

Bonzo (43F09) is recommended for detection of Bonzo of mouse origin by flow cytometry (1 μ g per 1 x 10⁶ cells).

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

Molecular Weight of Bonzo: 39 kDa.

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.