



Bonzo siRNA (h): sc-39895

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

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2. Deng, H., et al. 1996. Identification of a major co-receptor for primary isolates of HIV-1. *Nature* 381: 661-666.
3. Dragic, T., et al. 1996. HIV-1 entry into CD4⁺ cells is mediated by the chemokine receptor C-CR5. *Nature* 381: 667-673.
4. Choe, H., et al. 1996. The β -chemokine receptors CCR3 and CCR5 facilitate infection by primary HIV-1 isolates. *Cell* 85: 1135-1148.
5. Doranz, B.J., et al. 1996. A dual-tropic primary HIV-1 isolate that uses fusin and the β -chemokine receptors CR5, CR3, and CR2 β as fusion cofactors. *Cell* 85: 1149-1158.
6. Feng, Y., et al. 1996. HIV-1 entry cofactor: functional cDNA cloning of a seven-transmembrane, G protein-coupled receptor. *Science* 272: 872-877.
7. Alkhatib, G., et al. 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., et al. 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.

PRODUCT

Bonzo siRNA (h) is a pool of 3 target-specific 19-25 nt siRNAs designed to knock down gene expression. Each vial contains 3.3 nmol of lyophilized siRNA, sufficient for a 10 μ M solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Bonzo shRNA Plasmid (h): sc-39895-SH and Bonzo shRNA (h) Lentiviral Particles: sc-39895-V as alternate gene silencing products.

For independent verification of Bonzo (h) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-39895A, sc-39895B and sc-39895C.

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.

STORAGE AND RESUSPENSION

Store lyophilized siRNA duplex at -20° C with desiccant. Stable for at least one year from the date of shipment. Once resuspended, store at -20° C, avoid contact with RNAses and repeated freeze thaw cycles.

Resuspend lyophilized siRNA duplex in 330 μ l of the RNase-free water provided. Resuspension of the siRNA duplex in 330 μ l of RNase-free water makes a 10 μ M solution in a 10 μ M Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Bonzo siRNA (h) is recommended for the inhibition of Bonzo expression in human cells.

SUPPORT REAGENTS

For optimal siRNA transfection efficiency, Santa Cruz Biotechnology's siRNA Transfection Reagent: sc-29528 (0.3 ml), siRNA Transfection Medium: sc-36868 (20 ml) and siRNA Dilution Buffer: sc-29527 (1.5 ml) are recommended. Control siRNAs or Fluorescein Conjugated Control siRNAs are available as 10 μ M in 66 μ l. Each contain a scrambled sequence that will not lead to the specific degradation of any known cellular mRNA. Fluorescein Conjugated Control siRNAs include: sc-36869, sc-44239, sc-44240 and sc-44241. Control siRNAs include: sc-37007, sc-44230, sc-44231, sc-44232, sc-44233, sc-44234, sc-44235, sc-44236, sc-44237 and sc-44238.

RT-PCR REAGENTS

Semi-quantitative RT-PCR may be performed to monitor Bonzo gene expression knockdown using RT-PCR Primer: Bonzo (h)-PR: sc-39895-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.