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Hbb-bh1 siRNA (m): sc-145900

BACKGROUND

Hemoglobin, myoglobin, neuroglobin and cytoglobin are porphyrin-containing proteins that belong to the globin family and function in oxygen transport and storage. Hemoglobin contributes to oxygen storage and diffusion of oxygen in blood tissue. Hbb-bh1 (hemoglobin subunit β -H1), also known as Protein Z or β H1, is a 147 amino acid protein that belongs to the globin family. Existing as a heterotetramer of two α and two β chains, Hbb-bh1 is expressed in red blood cells. The gene encoding Hbb-bh1 maps to mouse chromosome 7 E3. The human homolog to Hbb-bh1, known as Hemoglobin or HBG1, is expressed in fetal liver, spleen and bone marrow until four or five weeks after birth. Fetal hemoglobin (HbF), which consists of two γ and two α chains, is replaced by adult hemoglobin (HbA) at birth.

REFERENCES

1. Jahn, C.L., Hutchison, C.A., Phillips, S.J., Weaver, S., Haigwood, N.L., Voliva, C.F. and Edgell, M.H. 1980. DNA sequence organization of the β -globin complex in the BALB/c mouse. *Cell* 21: 159-168.
2. Slightom, J.L., Blechl, A.E. and Smithies, O. 1980. Human fetal G γ - and A γ -globin genes: complete nucleotide sequences suggest that DNA can be exchanged between these duplicated genes. *Cell* 21: 627-638.
3. Shen, S.H., Slightom, J.L. and Smithies, O. 1981. A history of the human fetal globin gene duplication. *Cell* 26: 191-203.
4. Hill, A., Hardies, S.C., Phillips, S.J., Davis, M.G., Hutchison, C.A. and Edgell, M.H. 1984. Two mouse early embryonic β -globin gene sequences. Evolution of the nonadult β -globins. *J. Biol. Chem.* 259: 3739-3747.
5. Shehee, W.R., Loeb, D.D., Adey, N.B., Burton, F.H., Casavant, N.C., Cole, P., Davies, C.J., McGraw, R.A., Schichman, S.A. and Severynse, D.M. 1989. Nucleotide sequence of the BALB/c mouse β -globin complex. *J. Mol. Biol.* 205: 41-62.
6. Suzuki, N., Ando, S., Sumida, K., Horie, N. and Saito, K. 2011. Analysis of altered gene expression specific to embryotoxic chemical treatment during embryonic stem cell differentiation into myocardial and neural cells. *J. Toxicol. Sci.* 36: 569-585.

CHROMOSOMAL LOCATION

Genetic locus: Hbb-bh1 (mouse) mapping to 7 E3.

PRODUCT

Hbb-bh1 siRNA (m) is a target-specific 19-25 nt siRNA 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 Hbb-bh1 shRNA Plasmid (m): sc-145900-SH and Hbb-bh1 shRNA (m) Lentiviral Particles: sc-145900-V as alternate gene silencing products.

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

Hbb-bh1 siRNA (m) is recommended for the inhibition of Hbb-bh1 expression in mouse 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 Hbb-bh1 gene expression knockdown using RT-PCR Primer: Hbb-bh1 (m)-PR: sc-145900-PR (20 μ l). Annealing temperature for the primers should be 55-60° C and the extension temperature should be 68-72° C.

RESEARCH USE

For research use only, not for use in diagnostic procedures.