

Pira2 siRNA (m): sc-152273

BACKGROUND

Pira2 (paired-Ig-like receptor A2), also known as 6M23, is a 680 amino acid protein that belongs to the paired-Ig-like receptor A family. The genes encoding paired-Ig-like receptor A proteins tend to cluster in the leukocyte receptor complex (LRC) on murine chromosome 7 A1. Members of the paired-Ig-like receptor A family include: Pira1, Pira2, Pira3, Pira4, Pira6, Pira7 and Pira11. Pira1, also known as 6M21, Ly89 or Pir, is a 680 amino acid protein that is thought to be an Ig-like transmembrane receptor that contains six Ig-like loops. Pira1 has a short cytoplasmic tail and a charged Arg residue in the transmembrane region, suggesting that Pira1 may associate with an additional transmembrane protein to form a signal transducing complex.

REFERENCES

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3. Takai, T. 2005. Paired immunoglobulin-like receptors and their MHC class I recognition. *Immunology* 115: 433-440.
4. Torii, I., Oka, S., Hotomi, M., Benjamin, W.H., Takai, T., Kearney, J.F., Briles, D.E. and Kubagawa, H. 2008. PIR-B-deficient mice are susceptible to Salmonella infection. *J. Immunol.* 181: 4229-4239.
5. Licciulli, S., Cambiaghi, V., Scafetta, G., Gruszka, A.M. and Alcalay, M. 2010. Pirin downregulation is a feature of AML and leads to impairment of terminal myeloid differentiation. *Leukemia* 24: 429-437.

CHROMOSOMAL LOCATION

Genetic locus: Pira2 (mouse) mapping to 7 A1.

PRODUCT

Pira2 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 Pira2 shRNA Plasmid (m): sc-152273-SH and Pira2 shRNA (m) Lentiviral Particles: sc-152273-V as alternate gene silencing 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

Pira2 siRNA (m) is recommended for the inhibition of Pira2 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 Pira2 gene expression knockdown using RT-PCR Primer: Pira2 (m)-PR: sc-152273-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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.