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Histone cluster 2 H2AA1 siRNA (m): sc-146022

BACKGROUND

Eukaryotic histones are basic and water soluble nuclear proteins that form hetero-octameric nucleosome particles by wrapping 146 base pairs of DNA in a left-handed super-helical turn sequentially to form chromosomal fiber. Two molecules of each of the four core Histones (H2A, H2B, H3 and H4) form the octamer, which is comprised of two H2A-H2B dimers and two H3-H4 dimers, forming two nearly symmetrical halves by tertiary structure. Histones are subject to posttranslational modification by enzymes primarily on their N-terminal tails, but also in their globular domains. Histone cluster 2 H2AA3, also known as H2A, H2A.2, H2A/O, H2A/q, H2AFO, H2a-615, HIST2H2AA, HIST2H2AA4 or HIST2H2AA3, is a 130 amino acid nuclear protein belonging to the Histone H2A family. HIST2H2AA3 is encoded by a gene located on human chromosome 1q21.2, which spans 260 million base pairs, contains over 3,000 genes and comprises nearly 8% of the human genome.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 1986. Johns Hopkins University, Baltimore, MD. MIM Number: 142720. World Wide Web URL: <http://www.ncbi.nlm.nih.gov/omim/>
2. Collart, D., Romain, P.L., Huebner, K., Pockwinse, S., Pilapil, S., Cannizzaro, L.A., Lian, J.B., Croce, C.M., Stein, J.L. and Stein, G.S. 1992. A human Histone H2B.1 variant gene, located on chromosome 1, utilizes alternative 3' end processing. J. Cell. Biochem. 50: 374-385.
3. Albig, W. and Doenecke, D. 1997. The human histone gene cluster at the D6S105 locus. Hum. Genet. 101: 284-294.
4. Marzluff, W.F., Gongidi, P., Woods, K.R., Jin, J. and Maltais, L.J. 2002. The human and mouse replication-dependent histone genes. Genomics 80: 487-498.
5. Braastad, C.D., Hovhannisyan, H., van Wijnen, A.J., Stein, J.L. and Stein, G.S. 2004. Functional characterization of a human histone gene cluster duplication. Gene 342: 35-40.
6. Wang, H., Wang, L., Erdjument-Bromage, H., Vidal, M., Tempst, P., Jones, R.S. and Zhang, Y. 2004. Role of Histone H2A ubiquitination in Polycomb silencing. Nature 431: 873-878.
7. Zhao, Y., Lang, G., Ito, S., Bonnet, J., Metzger, E., Sawatsubashi, S., Suzuki, E., Le Guezennec, X., Stunnenberg, H.G., Krasnov, A., Georgieva, S.G., Schüle, R., Takeyama, K., Kato, S., Tora, L. and Devys, D. 2008. A TFC/STAGA module mediates Histone H2A and H2B deubiquitination, coactivates nuclear receptors, and counteracts heterochromatin silencing. Mol. Cell 29: 92-101.
8. Pinato, S., Scanduzzi, C., Arnaudo, N., Citterio, E., Gaudino, G. and Penengo, L. 2009. RNF168, a new RING finger, MIU-containing protein that modifies chromatin by ubiquitination of Histones H2A and H2AX. BMC Mol. Biol. 10: 55.

PROTOCOLS

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

CHROMOSOMAL LOCATION

Genetic locus: Hist2h2aa1 (mouse) mapping to 3 F2.1.

PRODUCT

Histone cluster 2 H2AA1 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see Histone cluster 2 H2AA1 shRNA Plasmid (m): sc-146022-SH and Histone cluster 2 H2AA1 shRNA (m) Lentiviral Particles: sc-146022-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 µl of the RNase-free water provided. Resuspension of the siRNA duplex in 330 µl of RNase-free water makes a 10 µM solution in a 10 µM Tris-HCl, pH 8.0, 20 mM NaCl, 1 mM EDTA buffered solution.

APPLICATIONS

Histone cluster 2 H2AA1 siRNA (m) is recommended for the inhibition of Histone cluster 2 H2AA1 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 µM in 66 µl. 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 Histone cluster 2 H2AA1 gene expression knockdown using RT-PCR Primer: Histone cluster 2 H2AA1 (m)-PR: sc-146022-PR (20 µl). 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.