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Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
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SZABO-SCANDIC HandelsgmbH
Quellenstraße 110, A-1100 Wien
T. +43(0)1 489 3961-0
F. +43(0)1 489 3961-7
mail@szabo-scandic.com
www.szabo-scandic.com

linkedin.com/company/szaboscandic

S-100PBP siRNA (m): sc-153190

BACKGROUND

The S-100 protein family consists of a group of calcium-binding proteins, which exhibit cell and tissue-specific expression. The expression levels of its members differ in various pathological conditions. The extracellular functions of the S-100 family may include the ability to enhance neurite outgrowth, involvement in inflammation, and motility of tumor cells. S-100PBP (S-100P binding protein) is a 408 amino acid protein that colocalizes with S-100P in the nucleus. S-100P is a survival factor that is associated with different types of tumors and can bind and regulate effector proteins. S-100P interacts with and activates the receptor for advanced glycation end products (RAGE), thereby increasing rates of cell growth, division, migration and invasion. S-100PBP is expressed in brain, spleen and lung, and is upregulated in various pancreatic ductal adenocarcinomas and pancreatic intraepithelial neoplasias. S-100PBP exists as two alternatively spliced isoforms.

REFERENCES

1. Averboukh, L., Liang, P., Kantoff, P.W. and Pardee, A.B. 1997. Regulation of S-100P expression by androgen. Prostate 29: 350-355.
2. Koltzscher, M. and Gerke, V. 2000. Identification of hydrophobic amino acid residues involved in the formation of S-100P homodimers *in vivo*. Biochemistry 39: 9533-9539.
3. Dowen, S.E., Crnogorac-Jurcevic, T., Gangeswaran, R., Hansen, M., Eloranta, J.J., Bhakta, V., Brentnall, T.A., Lüttges, J., Klöppel, G. and Lemoine, N.R. 2005. Expression of S-100P and its novel binding partner S-100PBPR in early pancreatic cancer. Am. J. Pathol. 166: 81-92.
4. Jiang, F., Shults, K., Flye, L., Hashimoto, Y., Van Der Meer, R., Xie, J., Kravtsov, V., Price, J., Head, D.R. and Briggs, R.C. 2005. S-100P is selectively upregulated in tumor cell lines challenged with DNA cross-linking agents. Leuk. Res. 29: 1181-1190.
5. Tutar, Y. 2006. Dimerization and ion binding properties of S-100P protein. Protein Pept. Lett. 13: 301-306.
6. Deng, H., Shi, J., Wilkerson, M., Meschter, S., Dupree, W. and Lin, F. 2008. Usefulness of S-100P in diagnosis of adenocarcinoma of pancreas on fine-needle aspiration biopsy specimens. Am. J. Clin. Pathol. 129: 81-88.
7. Lin, F., Shi, J., Liu, H., Hull, M.E., Dupree, W., Prichard, J.W., Brown, R.E., Zhang, J., Wang, H.L. and Schuerch, C. 2008. Diagnostic utility of S-100P and von Hippel-Lindau gene product (pVHL) in pancreatic adenocarcinoma-with implication of their roles in early tumorigenesis. Am. J. Surg. Pathol. 32: 78-91.
8. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 611889. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
9. Kim, J.K., Jung, K.H., Noh, J.H., Eun, J.W., Bae, H.J., Xie, H.J., Ahn, Y.M., Ryu, J.C., Park, W.S., Lee, J.Y. and Nam, S.W. 2009. Targeted disruption of S-100P suppresses tumor cell growth by down-regulation of cyclin D1 and CDK2 in human hepatocellular carcinoma. Int. J. Oncol. 35: 1257-1264.

CHROMOSOMAL LOCATION

Genetic locus: S100pbp (mouse) mapping to 4 D2.2.

PRODUCT

S-100PBP siRNA (m) 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 µM solution once resuspended using protocol below. Suitable for 50-100 transfections. Also see S-100PBP shRNA Plasmid (m): sc-153190-SH and S-100PBP shRNA (m) Lentiviral Particles: sc-153190-V as alternate gene silencing products.

For independent verification of S-100PBP (m) gene silencing results, we also provide the individual siRNA duplex components. Each is available as 3.3 nmol of lyophilized siRNA. These include: sc-153190A, sc-153190B and sc-153190C.

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

S-100PBP siRNA (m) is recommended for the inhibition of S-100PBP 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 S-100PBP gene expression knockdown using RT-PCR Primer: S-100PBP (m)-PR: sc-153190-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.

PROTOCOLS

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