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Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

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Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

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SANTA CRUZ BIOTECHNOLOGY, INC.

Stat5a (h2): 293T Lysate: sc-173609

BACKGROUND

Signal transducer and activator of transcription 5a (Stat5a) and Stat5b, which share 96% homology, undergo receptor tyrosine kinase or G protein-coupled receptor-dependent phosphorylation in response to cytokines or growth factors, and then form homo- or heterodimers that translocate to the nucleus, where they initiate transcription. Activation of Stat5a via IL-2, IL-3, IL-7 GM-CSF, erythropoietin, thrombopoietin and growth hormones influences proliferation, differentiation and apoptosis in lymphohematopoietic cells. Phosphorylation of Stat5a at Ser 127/Ser 128 and Ser 779 are contigent on ErbB4-mediated activation of Stat5a. Activation of Stat5b via IL-2, IL-4, CSF1 and growth hormones influences TCR signaling, apoptosis, adult mammary gland development and sexual dimorphism of liver gene expression. Stat5b is the major liver-expressed Stat5 form that has been shown to fuse with the retinoic acid receptor α gene in acute promyelocytic leukemias (APLL). Stat5a/b null mice have severely impaired lymphoid development and differentiation.

REFERENCES

1. Lin, J.X. and Leonard, W.J. 2000. The role of Stat5a and Stat5b in signaling by IL-2 family cytokines. Oncogene 19: 2566-2576.
2. Sexl, V., Piekorz, R., Moriggl, R., Rohrer, J., Brown, M.P., Bunting, K.D., Rothammer, K., Roussel, M.F. and Ihle, J.N. 2000. Stat5a/b contribute to interleukin 7-induced B cell precursor expansion, but Abl- and Bcr/Abl-induced transformation are independent of Stat5. Blood 96: 2277-2283.
3. Mahajan, S., Vassilev, A., Sun, N., Ozer, Z., Mao, C. and Uckun, F.M. 2001. Transcription factor Stat5a is a substrate of Bruton's tyrosine kinase in B cells. J. Biol. Chem. 276: 31216-31228.
4. Park, S.H., Yamashita, H., Rui, H. and Waxman, D.J. 2001. Serine phosphorylation of GH-activated signal transducer and activator of transcription 5a (Stat5a) and Stat5b: impact on Stat5 transcriptional activity. Mol. Endocrinol. 15: 2157-2171.
5. Benitah, S.A., Valerón, P.F., Rui, H. and Lacal, J.C. 2003. Stat5a activation mediates the epithelial to mesenchymal transition induced by oncogenic RhoA. Mol. Biol. Cell 14: 40-53.
6. Behbod, F., Nagy, Z.S., Stepkowski, S.M., Karras, J., Johnson, C.R., Jarvis, W.D. and Kirken, R.A. 2003. Specific inhibition of Stat5a/b promotes apoptosis of IL-2-responsive primary and tumor-derived lymphoid cells. J. Immunol. 171: 3919-3927.
7. Snow, J.W., Abraham, N., Ma, M.C., Herndier, B.G., Pastuszak, A.W. and Goldsmith, M.A. 2003. Loss of tolerance and autoimmunity affecting multiple organs in Stat5a/5b-deficient mice. J. Immunol. 171: 5042-5050.
8. Mazarakou, G.and Georgoussi Z. 2005. Stat5a interacts with and is phosphorylated upon activation of the μ-opioid receptor. J. Neurochem. 93: 918-931.
9. Clark, D.E., Williams, C.C., Duplessis, T.T., Moring, K.L., Notwick, A.R., Long, W., Lane, W.S., Beuvink, I., Hynes, N.E. and Jones, F.E. 2005. ErbB-4/ HER4 potentiates Stat5a transcriptional activity by regulating novel Stat5a serine phosphorylation events. J. Biol. Chem. 280: 24175-24180.

CHROMOSOMAL LOCATION

Genetic locus: STAT5A (human) mapping to 17q21.2.

PRODUCT

Stat5a (h2): 293T Lysate represents a lysate of human Stat5a transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

APPLICATIONS

Stat5a (h2): 293T Lysate is suitable as a Western Blotting positive control for human reactive Stat5a antibodies. Recommended use: 10-20 µl per lane.

Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

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.