SANTA CRUZ BIOTECHNOLOGY, INC.

Ptx3 (h): 293T Lysate: sc-115482

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Pentraxins are a protein superfamily characterized by a cyclic multimeric structure. Ptx3, also known as tumor necrosis factor-stimulated gene sequence-14 (TSG14), is a secreted pattern-recognition receptor that has a non-redundant role in resistance to selected microbial agents. Ptx3 belongs to the family of "long pentraxins," which have C-terminal pentraxin domains and novel amino-terminal domains. Ptx3 binds selected pathogens, including *Aspergillus fumigatus*, *Pseudomonas aeruginosa* and *Salmonella typhimurium*. It is synthesized in IgA glomerulonephritis and activates mesangial cells. Secretion of Ptx3 in adipose cells can be induced by TNFα. Ptx3 is also involved in amplification of inflammatory reactions and regulation of innate immunity.

REFERENCES

1. Basile, A., Sica, A., d'Aniello, E., Breviario, F., Garrido, G., Castellano, M., Mantovani, A. and Introna, M. 1997. Characterization of the promoter for the human long pentraxin Ptx3. Role of NFκB in tumor necrosis factor-α and interleukin-1β regulation. J. Biol. Chem. 272: 8172-8178.
2. Garlanda, C., Hirsch, E., Bozza, S., Salustri, A., De Acetis, M., Nota, R., Maccagno, A., Riva, F., Bottazzi, B., Peri, G., et al. 2002. Non-redundant role of the long pentraxin Ptx3 in anti-fungal innate immune response. Nature 420: 182-186.
3. Rolph, M.S., Zimmer, S., Bottazzi, B., Garlanda, C., Mantovani, A. and Hansson, G.K. 2002. Production of the long pentraxin Ptx3 in advanced atherosclerotic plaques. Arterioscler. Thromb. Vasc. Biol. 22: e10-e14.
4. Bussolati, B., Peri, G., Salvidio, G., Verzola, D., Mantovani, A. and Camussi, G. 2003. The long pentraxin Ptx3 is synthesized in IgA glomerulonephritis and activates mesangial cells. J. Immunol. 170: 1466-1472.
5. Abderrahim-Ferkoune, A., Bezy, O., Chiellini, C., Maffei, M., Grimaldi, P., Bonino, F., Moustaid-Moussa, N., Pasqualini, F., Mantovani, A., Ailhaud, G. and Amri, E.Z. 2003. Characterization of the long pentraxin Ptx3 as a TNFα-induced, secreted protein of adipose cells. J. Lipid Res. 44: 994-1000.
6. Online Mendelian Inheritance in Man, OMIM™. 2008. Johns Hopkins University, Baltimore, MD. MIM Number: 602492. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/

CHROMOSOMAL LOCATION

Genetic locus: PTX3 (human) mapping to 3q25.32.

PRODUCT

Ptx3 (h): 293T Lysate represents a lysate of human Ptx3 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

PROTOCOLS

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

APPLICATIONS

Ptx3 (h): 293T Lysate is suitable as a Western Blotting positive control for human reactive Ptx3 antibodies. Recommended use: 10-20 µl per lane.

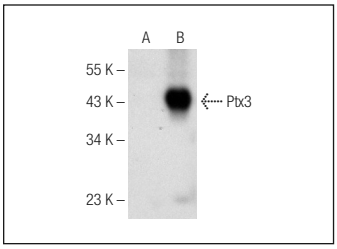
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

Ptx3 (C-10): sc-373951 is recommended as a positive control antibody for Western Blot analysis of enhanced human Ptx3 expression in Ptx3 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



Ptx3 (C-10): sc-373951. Western blot analysis of Ptx3 expression in non-transfected: sc-117752 (**A**) and human Ptx3 transfected: sc-115482 (**B**) 293T whole cell lysates.

RESEARCH USE

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