## SANTA CRUZ BIOTECHNOLOGY, INC.

# Ptx3 (H-300): sc-32866



## BACKGROUND

Pentraxins are a protein superfamily that is 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 TNF $\alpha$ . Ptx3 is also involved in amplification of inflammatory reactions and regulation of innate immunity. The human PTX3 gene maps to chromosome 3q25.

#### REFERENCES

- 1. Basile, A., et al. 1997. Characterization of the promoter for the human long pentraxin Ptx3. Role of NF $\kappa$ B in tumor necrosis factor- $\alpha$  and interleukin-1 $\beta$  regulation. J. Biol. Chem. 272: 8172-8178.
- Garlanda, C., 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., et al. 2002. Production of the long pentraxin PTX3 in advanced atherosclerotic plaques. Arterioscler. Thromb. Vasc. Biol. 22: 10-14.
- 4. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 602492 World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
- Bussolati, B., et al. 2003. The long pentraxin Ptx3 is synthesized in IgA glomerulonephritis and activates mesangial cells. J. Immunol.170: 1466-1472.
- 6. Abderrahim-Ferkoune, A., et al. 2003. Characterization of the long pentraxin Ptx3 as a TNF $\alpha$ -induced, secreted protein of adipose cells. J. Lipid Res.

#### CHROMOSOMAL LOCATION

Genetic locus: PTX3 (human) mapping to 3q25; Ptx3 (mouse) mapping to 3 E1.

#### SOURCE

Ptx3 (H-300) is a rabbit polyclonal antibody raised against amino acids 21-320 (deletion 89-152) mapping within an internal region of Ptx3 of human origin.

## PRODUCT

Each vial contains 200  $\mu g$  IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

#### **STORAGE**

Store at 4° C, \*\*D0 NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

#### PROTOCOLS

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

#### **APPLICATIONS**

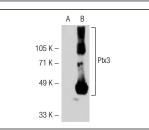
Ptx3 (H-300) is recommended for detection of Ptx3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μg per 100-500 μg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Ptx3 siRNA (h): sc-39817, Ptx3 siRNA (m): sc-39818, Ptx3 shRNA Plasmid (h): sc-39817-SH, Ptx3 shRNA Plasmid (m): sc-39818-SH, Ptx3 shRNA (h) Lentiviral Particles: sc-39817-V and Ptx3 shRNA (m) Lentiviral Particles: sc-39818-V.

#### **RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker<sup>™</sup> compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz<sup>™</sup> Mounting Medium: sc-24941.

#### DATA



Ptx3 (H-300): sc-32866. 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.

#### MONOS Satisfation Guaranteed Try Ptx3 (C-10): sc-373951, our highly recommended monoclonal alternative to Ptx3 (H-300).