

GATA-3 (C-18): sc-1236

BACKGROUND

Members of the GATA family share a conserved zinc finger DNA-binding domain and are capable of binding the WGATAR consensus sequence. GATA-1 is erythroid-specific and is responsible for the regulated transcription of erythroid genes. GATA-2 is expressed in embryonic brain and liver, HeLa and endothelial cells, as well as erythroid cells. Studies with a modified GATA consensus sequence, AGATCTTA, have shown that GATA-2 and GATA-3 recognize this mutated consensus while GATA-1 has poor recognition of this sequence. This indicates broader regulatory capabilities of GATA-2 and GATA-3 than GATA-1. GATA-3 is highly expressed in T-lymphocytes. Although expression patterns of the various GATA transcription factors may overlap, it is not yet apparent how the GATA factors are able to discriminate in binding their appropriate target sites.

CHROMOSOMAL LOCATION

Genetic locus: GATA3 (human) mapping to 10p14; Gata3 (mouse) mapping to 2 A1.

SOURCE

GATA-3 (C-18) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-terminus of GATA-3 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-1236 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-1236 X, 200 µg/0.1 ml.

APPLICATIONS

GATA-3 (C-18) is recommended for detection of GATA-3 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).

GATA-3 (C-18) is also recommended for detection of GATA-3 in additional species, including canine, bovine, porcine and avian.

Suitable for use as control antibody for GATA-3 siRNA (h): sc-29331, GATA-3 siRNA (m): sc-35453, GATA-3 siRNA (r): sc-61845, GATA-3 shRNA Plasmid (h): sc-29331-SH, GATA-3 shRNA Plasmid (m): sc-35453-SH, GATA-3 shRNA Plasmid (r): sc-61845-SH, GATA-3 shRNA (h) Lentiviral Particles: sc-29331-V, GATA-3 shRNA (m) Lentiviral Particles: sc-35453-V and GATA-3 shRNA (r) Lentiviral Particles: sc-61845-V.

GATA-3 (C-18) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

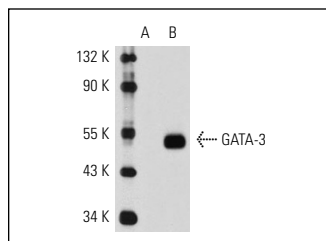
Molecular Weight of GATA-3: 50 kDa.

Positive Controls: GATA-3 (h): 293 Lysate: sc-110481.

STORAGE

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

DATA



GATA-3 (C-18): sc-1236. Western blot analysis of GATA-3 expression in non-transfected: sc-110760 (A) and human GATA-3 transfected: sc-110481 (B) 293 whole cell lysates.

SELECT PRODUCT CITATIONS

- Agarwal, S., et al. 2000. Cell-type-restricted binding of the transcription factor NFAT to a distal IL-4 enhancer *in vivo*. *Immunity* 12: 643-652.
- Kamitani, H., et al. 2000. A GATA binding site is involved in the regulation of 15-lipoxygenase-1 expression in human colorectal carcinoma cell line, caco-2. *FEBS Lett.* 467: 341-347.
- Finotto, S., et al. 2001. Treatment of allergic airway inflammation and hyperresponsiveness by antisense-induced local blockade of GATA-3 expression. *J. Exp. Med.* 193: 1247-1260.
- Dame, C., et al. 2002. Developmental changes in the expression of transcription factors GATA-1, -2 and -3 during the onset of human medullary haematopoiesis. *Br. J. Haematol.* 119: 510-515.
- Klinakis, A., et al. 2009. Igf1r as a therapeutic target in a mouse model of basal-like breast cancer. *Proc. Natl. Acad. Sci. USA* 106: 2359-2364.
- Hoene, V., et al. 2009. GATA factors in human neuroblastoma: distinctive expression patterns in clinical subtypes. *Br. J. Cancer* 101: 1481-1489.
- Skaggs, K., et al. 2011. Regulation of spinal interneuron development by the Olig-related protein Bhlhb5 and Notch signaling. *Development* 138: 3199-3211.

RESEARCH USE

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

PROTOCOLS

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