**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 responsible for the regulated transcription of erythroid genes. It is an essential component in the generation of the erythroid lineage. 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. GATA-4, GATA-5 and GATA-6 comprise a subfamily of transcription factors. GATA-4 and GATA-6 are found in heart, pancreas and ovary; lung and liver tissues exhibit GATA-6, but not GATA-4. Expression of GATA-5 has been observed in differentiated heart and gut tissues and is present throughout the course of development in the heart. 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.

**REFERENCES**


**CHROMOSOMAL LOCATION**

Genetic locus: GATA1 (human) mapping to Xp11.23; Gata1 (mouse) mapping to X A1.1.

**SOURCE**

GATA-1 (N6) is a rat monoclonal antibody raised against recombinant GATA-1 of mouse origin.

**PRODUCT**

Each vial contains 200 µg IgG2a in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-265 X, 200 µg/0.1 ml.

**APPLICATIONS**

GATA-1 (N6) is recommended for detection of GATA-1 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Suitable for use as control antibody for GATA-1 siRNA (h): sc-29330, GATA-1 siRNA (m): sc-35452, GATA-1 shRNA Plasmid (h): sc-29330-SH, GATA-1 shRNA Plasmid (m): sc-35452-SH, GATA-1 shRNA (h) Lentiviral Particles: sc-29330-V and GATA-1 shRNA (m) Lentiviral Particles: sc-35452-V.

GATA-1 (N6) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of GATA-1: 47 kDa.

Positive Controls: NIH/3T3 nuclear extract: sc-2138, K-562 nuclear extract: sc-2130 or HEL 92.1.7 cell lysate: sc-2270.

**DATA**

GATA-1 (N6): sc-265. Western blot analysis of GATA-1 expression in NIH/3T3 nuclear extract.

**SELECT PRODUCT CITATIONS**


**RESEARCH USE**

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

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