

# Gfi-1 (N-20): sc-8558

## BACKGROUND

Growth factor independent 1 (Gfi-1) is a transcriptional repressor that specifically binds to the DNA consensus sequence TAAATCAC(A/T)GCA. The carboxy-terminus of Gfi-1 contains six C<sub>2</sub>H<sub>2</sub>-type zinc finger motifs, and zinc fingers 3, 4 and 5 are required for the binding of Gfi-1 to its DNA binding site. Gfi-1 also contains a 20 amino acid SNAG domain which mediates transcriptional repression. It represses Bax at the mRNA and protein levels, resulting in the inhibition of cell death. Gfi-1 is expressed outside the lymphoid system in granulocytes and activated macrophages. Gfi-1B, a related protein, is a transcriptional repressor primarily expressed in bone marrow and spleen. Gfi-1B is a direct repressor of the p21 promoter and the Socs 1 and 3 promoters. The genes encoding human Gfi-1 and Gfi-1B map to chromosome 1p22 and 9q34.3, respectively.

## CHROMOSOMAL LOCATION

Genetic locus: GF11 (human) mapping to 1p22.1; Gfi1 (mouse) mapping to 5 F.

## SOURCE

Gfi-1 (N-20) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of Gfi-1 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-8558 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-8558 X, 200 µg/0.1 ml.

## APPLICATIONS

Gfi-1 (N-20) is recommended for detection of Gfi-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 solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Gfi-1 (N-20) is also recommended for detection of Gfi-1 in additional species, including canine and bovine.

Suitable for use as control antibody for Gfi-1 siRNA (h): sc-35467, Gfi-1 siRNA (m): sc-35468, Gfi-1 shRNA Plasmid (h): sc-35467-SH, Gfi-1 shRNA Plasmid (m): sc-35468-SH, Gfi-1 shRNA (h) Lentiviral Particles: sc-35467-V and Gfi-1 shRNA (m) Lentiviral Particles: sc-35468-V.

Gfi-1 (N-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

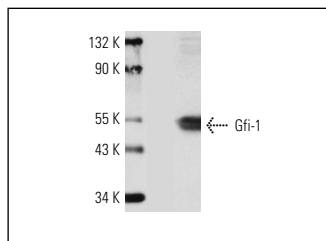
Molecular Weight of Gfi-1: 55 kDa.

Positive Controls: RBL-1 whole cell lysate: sc-364790 or THP-1 cell lysate: sc-2238.

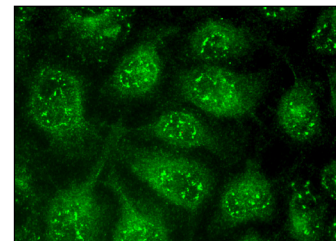
## STORAGE

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

## DATA



Gfi-1 (N-20): sc-8558. Western blot analysis of Gfi-1 expression in THP-1 whole cell lysate.



Gfi-1 (N-20): sc-8558. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization.

## SELECT PRODUCT CITATIONS

- Rödel, B., et al. 2000. The zinc finger protein Gfi-1 can enhance Stat3 signaling by interacting with the Stat3 inhibitor PIAS3. *EMBO J.* 19: 5845-5855.
- Nakazawa, Y., et al. 2007. Cooperative interaction between ETS1 and GFI1 transcription factors in the repression of Bax gene expression. *Oncogene* 6: 3541-3550.
- De La Luz Sierra, M., et al. 2007. Transcription factor Gfi-1 induced by G-CSF is a negative regulator of CXCR4 in myeloid cells. *Blood* 110: 2276-2285.
- Laurent, B., et al. 2009. Gfi-1B promoter remains associated with active chromatin marks throughout erythroid differentiation of human primary progenitor cells. *Stem Cells* 27: 2153-2162.
- Aude-Garcia, C., et al. 2010. Dual roles for MEF2A and MEF2D during human macrophage terminal differentiation and c-Jun expression. *Biochem. J.* 430: 237-244.
- Lidonnici, M.R., et al. 2010. Expression of the transcriptional repressor Gfi-1 is regulated by C/EBPα and is involved in its proliferation and colony formation-inhibitory effects in p210BCR/ABL-expressing cells. *Cancer Res.* 70: 7949-7959.
- Khandanpour, C., et al. 2010. A variant allele of growth factor independence 1 (GFI1) is associated with acute myeloid leukemia. *Blood* 115: 2462-2472.

## RESEARCH USE

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

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Try **Gfi-1 (B-9): sc-376949** or **Gfi-1 (G-11): sc-373960**, our highly recommended monoclonal alternatives to Gfi-1 (N-20).