

c-Fgr (B-8): sc-166079

BACKGROUND

Src is the human homolog of the v-Src gene of the rous sarcoma virus, also designated avian sarcoma virus or ASV. Src was the first proto-oncogenic non-receptor tyrosine kinase characterized in human. The Src family, which has common structural motifs, is composed of nine members in vertebrates, including Src, Yes, Fgr, Frk, Fyn, Lyn, Hck, Lck and Blk. Src-family kinases transduce signals that are involved in the control of a variety of cellular processes, including proliferation, differentiation, motility and adhesion. Src-family kinases contain an amino-terminal cell membrane anchor followed by an SH3 domain and an SH2 domain, which are involved in modular association and activation, respectively. Src-family kinases, which are normally maintained in an inactive state and can be activated transiently during cellular events such as mitosis. Different subcellular localizations of Src-family kinases may be important for the regulation of specific cellular processes such as mitogenesis, cytoskeletal organization and membrane trafficking. c-Fgr is a human non-receptor tyrosine kinase family member that was discovered by using a probe toward the v-Fgr portion of the cell-derived domain of Gardner-Rasheed feline sarcoma virus. The human c-Fgr gene encodes a 529 amino acid protein.

REFERENCES

1. Sakaguchi, A.Y., et al. 1982. Organization of human proto-oncogenes. *Am. J. Hum. Genet.* 34: 175.
2. Tronick, S.R., et al. 1985. Isolation and chromosomal localization of the human fgr protooncogene, a distinct member of the tyrosine kinase gene family. *Proc. Natl. Acad. Sci. USA* 82: 6595-6599.
3. Williams, J.C., et al. 1998. Insights into Src kinase functions: structural comparisons. *Trends Biochem. Sci.* 23: 179-184.

CHROMOSOMAL LOCATION

Genetic locus: FGR (human) mapping to 1p36.11; Fgr (mouse) mapping to 4 D2.3.

SOURCE

c-Fgr (B-8) is a mouse monoclonal antibody raised against amino acids 4-78 mapping at the N-terminus of c-Fgr of human origin.

PRODUCT

Each vial contains 200 µg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

c-Fgr (B-8) is available conjugated to agarose (sc-166079 AC), 500 µg/0.25 ml agarose in 1 ml, for IP; to HRP (sc-166079 HRP), 200 µg/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-166079 PE), fluorescein (sc-166079 FITC), Alexa Fluor® 488 (sc-166079 AF488), Alexa Fluor® 546 (sc-166079 AF546), Alexa Fluor® 594 (sc-166079 AF594) or Alexa Fluor® 647 (sc-166079 AF647), 200 µg/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor® 680 (sc-166079 AF680) or Alexa Fluor® 790 (sc-166079 AF790), 200 µg/ml, for Near-Infrared (NIR) WB, IF and FCM.

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APPLICATIONS

c-Fgr (B-8) is recommended for detection of c-Fgr p55 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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 c-Fgr siRNA (h): sc-39229, c-Fgr siRNA (m): sc-39230, c-Fgr shRNA Plasmid (h): sc-39229-SH, c-Fgr shRNA Plasmid (m): sc-39230-SH, c-Fgr shRNA (h) Lentiviral Particles: sc-39229-V and c-Fgr shRNA (m) Lentiviral Particles: sc-39230-V.

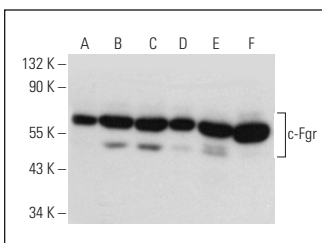
Molecular Weight of c-Fgr: 55 kDa.

Positive Controls: MOLT-4 cell lysate: sc-2233, HeLa whole cell lysate: sc-2200 or Hep G2 cell lysate: sc-2227.

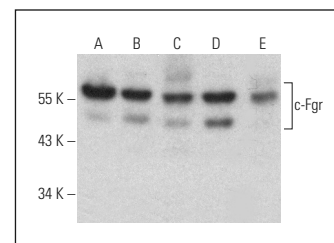
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



c-Fgr (B-8): sc-166079. Western blot analysis of c-Fgr expression in Hep G2 (A), MOLT-4 (B), Ramos (C), HeLa (D), HL-60 (E) and Raji (F) whole cell lysates.



c-Fgr (B-8): sc-166079. Western blot analysis of c-Fgr expression in Raji (A), RAW 264.7 (B) and PC-12 (C) whole cell lysates and mouse spleen (D) and rat lung (E) tissue extracts.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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