

Fes (H-65): sc-25415

BACKGROUND

Fes, a tyrosine kinase encoded by the proto-oncogene *c-fes*, is expressed in macrophages and is thought to be involved in the regulation of myeloid differentiation. Fes has several characteristics typical of a cytoplasmic class of protein tyrosine kinases, including an SH2 domain and autophosphorylation capabilities. Fes has been shown to associate with IL-4 and several hematopoietic cytokine receptors, as well as with BCR. Phosphorylation of BCR by Fes induces the association of BCR with the Ras guanine nucleotide exchange factor complex GRB2/Sos.

REFERENCES

- Hjermstad, S.J., Peters, K.L., Briggs, S.D., Glazer, R.I. and Smithgall, T.E. 1993. Regulation of the human *c-Fes* protein kinase (p93 *c-Fes*) by its src homology 2 domain and major autophosphorylation site (Tyr-713). *Oncogene* 8: 2283-2292.
- Hjermstad, S.J., Briggs, S.D. and Smithgall, T.E. 1993. Phosphorylation of the ras GTPase-activating protein (GAP) by the p93c-Fes protein kinase *in vitro* and formation of GAP-Fes complexes via an SH2 domain-dependent mechanism. *Biochemistry* 32: 10519-10525.

CHROMOSOMAL LOCATION

Genetic locus: FES (human) mapping to 15q26.1; Fes (mouse) mapping to 7 D3.

SOURCE

Fes (H-65) is a rabbit polyclonal antibody raised against amino acids 758-822 of Fes 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.

APPLICATIONS

Fes (H-65) is recommended for detection of Fes 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), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Fes (H-65) is also recommended for detection of Fes in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for Fes siRNA (h): sc-35365, Fes siRNA (m): sc-35366, Fes shRNA Plasmid (h): sc-35365-SH, Fes shRNA Plasmid (m): sc-35366-SH, Fes shRNA (h) Lentiviral Particles: sc-35365-V and Fes shRNA (m) Lentiviral Particles: sc-35366-V.

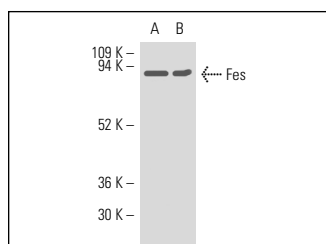
Molecular Weight of Fes: 93 kDa.

Positive Controls: rat heart extract: sc-2393, HL-60 whole cell lysate: sc-2209 or mouse heart extract: sc-2254.

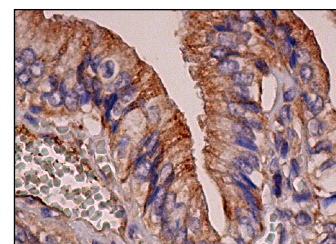
RECOMMENDED SECONDARY REAGENTS

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™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ 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™ Mounting Medium: sc-24941. 4) Immunohistochemistry: use ImmunoCruz™: sc-2051 or ABC: sc-2018 rabbit IgG Staining Systems.

DATA



Fes (H-65): sc-25415. Western blot analysis of Fes expression in mouse heart (A) and rat heart (B) tissue extracts.



Fes (H-65): sc-25415. Immunoperoxidase staining of formalin fixed, paraffin-embedded human gall bladder tissue showing cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- Lennartsson, J., Ma, H., Wardega, P., Pelka, K., Engstrom, U., Hellberg, C. and Heldin, C.H. 2013. The Fer tyrosine kinase is important for platelet-derived growth factor-BB-induced signal transducer and activator of transcription 3 (STAT3) protein phosphorylation, colony formation in soft agar, and tumor growth *in vivo*. *J. Biol. Chem.* 288: 15736-15744.

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 or our catalog for detailed protocols and support products.



Try **Fes (D-9): sc-377179** or **Fes (E-1): sc-166371**, our highly recommended monoclonal alternatives to Fes (H-65).