

FIH-1 (F-11): sc-365128

BACKGROUND

Factor inhibiting HIF-1 (FIH-1) exists as a homodimer and binds to HIF-1 α . Specifically, FIH-1 operates as an asparaginyl hydroxylase. FIH-1 catalyzes the hydroxylation of the β -carbon of asparagine residue 803 within the C-terminal transactivation domain of HIF-1 α . This hydroxylation event blocks the association of HIF-1 α with coactivators. FIH-1 also binds to von Hippel-Lindau (VHL) tumor suppressor protein, which represses transcriptional activity of HIF-1 α . In transiently transfected human osteosarcoma cells, FIH-1 localizes to the cytoplasm. The structure of FIH-1 includes a jellyroll-like β -barrel containing ferrous-binding triad residues. The gene encoding human FIH-1 maps to chromosome 10q24.31.

REFERENCES

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CHROMOSOMAL LOCATION

Genetic locus: HIF1AN (human) mapping to 10q24.31; Hif1an (mouse) mapping to 19 C3.

SOURCE

FIH-1 (F-11) is a mouse monoclonal antibody raised against amino acids 15-243 mapping within an internal region of FIH-1 of human origin.

PRODUCT

Each vial contains 200 μ g IgG_{2b} kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

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

APPLICATIONS

FIH-1 (F-11) is recommended for detection of FIH-1 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g 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 FIH-1 siRNA (h): sc-37885, FIH-1 siRNA (m): sc-37886, FIH-1 shRNA Plasmid (h): sc-37885-SH, FIH-1 shRNA Plasmid (m): sc-37886-SH, FIH-1 shRNA (h) Lentiviral Particles: sc-37885-V and FIH-1 shRNA (m) Lentiviral Particles: sc-37886-V.

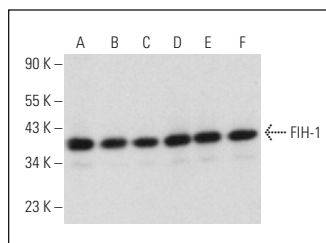
Molecular Weight of FIH-1: 40 kDa.

Positive Controls: A-375 cell lysate: sc-3811, Sol8 nuclear extract: sc-2157 or HL-60 whole cell lysate: sc-2209.

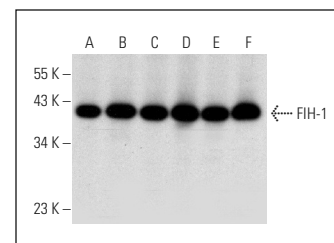
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ 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-IgG κ BP-FITC: sc-516140 or m-IgG κ 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



FIH-1 (F-11): sc-365128. Western blot analysis of FIH-1 expression in A2058 (A), A-673 (B), C2C12 (C), BC₃H1 (D), A-10 (E) and L6 (F) whole cell lysates.



FIH-1 (F-11): sc-365128. Western blot analysis of FIH-1 expression in Sol8 nuclear extract (A) and A-375 (B), HL-60 (C), HEK293 (D), A-431 (E) and Raji (F) whole cell lysates.

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.