

Chfr (D-15): sc-13288

BACKGROUND

The forkhead-associated (FHA) domain was initially identified in transcription factors that have forkhead DNA-binding domains and in protein kinases, but many cell-cycle checkpoint proteins, including *chfr* (checkpoint with forkhead and ring finger domains) contain FHA domains. *Chfr* defines a checkpoint that delays entry into metaphase in response to mitotic stress. Normal primary cells and tumor cell lines that express wild-type *chfr* exhibit delayed entry into metaphase when centrosome separation is inhibited by mitotic stress. Additionally, *chfr* seems to be required for delaying prophase in human cells. The sequence of *chfr* is similar to that of the fission yeast *DMA1*, which is involved in a later mitotic checkpoint that delays a cell's exit from mitosis in response to spindle damage.

REFERENCES

1. Jha, M.N., et al. 1994. Cell cycle arrest by Colcemid differs in human normal and tumor cells. *Cancer Res.* 54: 5011-5015.
2. Hofmann, K. and Bucher, P. 1995. The FHA domain: a putative nuclear signalling domain found in protein kinases and transcription factors. *Trends Biochem. Sci.* 20: 347-349.

CHROMOSOMAL LOCATION

Genetic locus: *CHFR* (human) mapping to 12q24.33; *Chfr* (mouse) mapping to 5 F.

SOURCE

Chfr (D-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of *Chfr* 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-13288 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

Chfr (D-15) is recommended for detection of *Chfr* of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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).

Chfr (D-15) is also recommended for detection of *Chfr* in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for *Chfr* siRNA (h): sc-37567, *Chfr* siRNA (m): sc-142325, *Chfr* shRNA Plasmid (h): sc-37567-SH, *Chfr* shRNA Plasmid (m): sc-142325-SH, *Chfr* shRNA (h) Lentiviral Particles: sc-37567-V and *Chfr* shRNA (m) Lentiviral Particles: sc-142325-V.

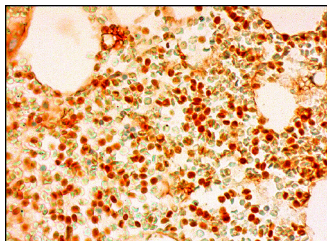
Molecular Weight of *Chfr* isoforms: 73/72/69/64 kDa.

Positive Controls: ES-2 cell lysate: sc-24674.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941. 3) Immunohistochemistry: use ImmunoCruz™: sc-2053 or ABC: sc-2023 goat IgG Staining Systems.

DATA



Chfr (D-15): sc-13288. Immunoperoxidase staining of formalin fixed, paraffin-embedded human bone marrow tissue showing nuclear staining of subset of hematopoietic cells.

SELECT PRODUCT CITATIONS

1. Kobayashi, C., et al. 2006. Aberrant expression of *Chfr* in malignant peripheral nerve sheath tumors. *Mod. Pathol.* 19: 524-532.
2. Kashima, L., et al. 2009. *CHFR*, a potential tumor suppressor, downregulates interleukin-8 through the inhibition of NFκB. *Oncogene* 28: 2643-2653.

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.

MONOS
Satisfaction
Guaranteed

Try **Chfr (L2): sc-81832**, our highly recommended monoclonal alternative to *Chfr* (D-15).