

# HCF1 (N-16): sc-13426

## BACKGROUND

The herpes simplex virus infection is initiated by VP16, a viral transcription factor that activates the viral immediate-early (IE) genes. VP16 recognizes the IE gene promoters by forming a multiprotein complex with Oct-1 and HCF1 (host cell factor 1), a nuclear protein required for progression through the G<sub>1</sub> phase of the cell cycle. This multiprotein complex, called C1, is responsible for transcription of the HSV immediate-early genes and may be critical for the regulation of the HSV lytic-latent cycle. HCF1 is cleaved posttranslationally into separate, but associated, N- and C-terminal polypeptides. The cytoplasmic N-terminal fragment of HCF1 arises by proteolysis of full length HCF1 and associates with VP16. The C-terminal polypeptide of HCF1, distinct from the form of HCF1 that interacts with VP16, exists in a nuclear complex with protein phosphatase 1.

## REFERENCES

1. Johnson, K.M., et al. 1999. Herpes simplex virus transactivator VP16 discriminates between HCF1 and a novel family member, HCF2. *J. Virol.* 73: 3930-3940.
2. Lu, R. and Misra, V., 2000. Zhangfei: a second cellular protein interacts with herpes simplex virus accessory factor HCF in a manner similar to Luman and VP16. *Nucleic Acids Res.* 28: 2446-2454.
3. Mahajan, S.S. and Wilson, A.C. 2000. Mutations in host cell factor 1 separate its role in cell proliferation from recruitment of VP16 and LZIP. *Mol. Cell. Biol.* 20: 919-928.
4. Scarr, R.B., et al. 2000. A novel 50 kDa fragment of host cell factor 1 (C1) in G<sub>0</sub> cells. *Mol. Cell. Biol.* 20: 3568-3575.
5. Vogel, J.L. and Kristie, T.M. 2000. The novel coactivator C1 (HCF) coordinates multiprotein enhancer formation and mediates transcription activation by GABP. *EMBO J.* 19: 683-690.

## CHROMOSOMAL LOCATION

Genetic locus: HCFC1 (human) mapping to Xq28; Hcfc1 (mouse) mapping to X A7.3.

## SOURCE

HCF1 (N-16) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of HCF1 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. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-13426 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-13426 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

## STORAGE

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

## APPLICATIONS

HCF1 (N-16) is recommended for detection of HCF1 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).

HCF1 (N-16) is also recommended for detection of HCF1 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for HCF1 siRNA (h): sc-37996, HCF1 siRNA (m): sc-37997, HCF1 shRNA Plasmid (h): sc-37996-SH, HCF1 shRNA Plasmid (m): sc-37997-SH, HCF1 shRNA (h) Lentiviral Particles: sc-37996-V and HCF1 shRNA (m) Lentiviral Particles: sc-37997-V.

HCF1 (N-16) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

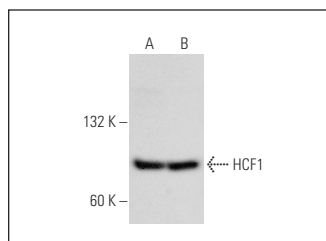
Molecular Weight of full-length HCF1 precursor: 230 kDa.

Molecular Weight of HCF1 polypeptide: 100 kDa.

Molecular Weight of HCF1 subunits: 123-135 kDa.

Positive Controls: Hep G2 cell lysate: sc-2227 or KNRK whole cell lysate: sc-2214.

## DATA



HCF1 (N-16): sc-13426. Western blot analysis of HCF1 expression in Hep G2 (A) and KNRK (B) whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.


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Try **HCF1 (H-8): sc-390950**, our highly recommended monoclonal alternative to HCF1 (N-16).