

HCF1/2 (C-19): sc-13432

BACKGROUND

The herpes simplex virus (HSV) 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 G₁ 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. A second HCF-like protein, designated HCF2 is smaller than HCF1 and is homologous with HCF1 in the β-propeller domain, which is required for association with VP16. HCF2 associates with VP16 and supports complex assembly with Oct-1 and DNA, although binds VP16 less efficiently than HCF1. This VP16 binding selectivity is dictated by differences in the kelch repeats of the β-propeller domains of HCF1 and HCF2.

CHROMOSOMAL LOCATION

Genetic locus: HCFC1 (human) mapping to Xq28, HCFC2 (human) mapping to 12q23.3; Hcfc1 (mouse) mapping to X A7.3, Hcfc2 (mouse) mapping to 10 C1.

SOURCE

HCF1/2 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-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-13432 X, 200 μg/0.1 ml.

Blocking peptide available for competition studies, sc-13432 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

HCF1/2 (C-19) is recommended for detection of HCF1 and HCF2 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).

HCF1/2 (C-19) is also recommended for detection of HCF1 and HCF2 in additional species, including equine, canine, bovine and porcine.

HCF1/2 (C-19) 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.

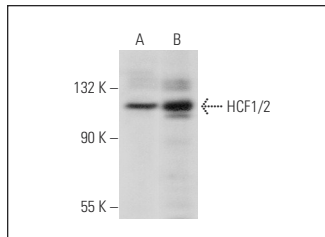
Molecular Weight of HCF1 subunits: 123-135 kDa.

Positive Controls: HCF1/2 (m): 293T Lysate: sc-372430, IMR-32 cell lysate: sc-2409 or IMR-32 nuclear extract: sc-2148.

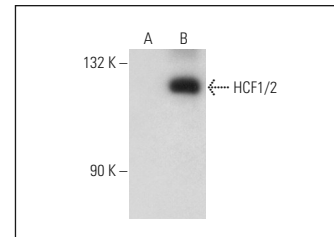
RECOMMENDED SECONDARY REAGENTS

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) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) 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.

DATA



HCF1/2 (C-19): sc-13432. Western blot analysis of HCF1/2 expression in IMR-32 whole cell lysate (A) and IMR-32 nuclear extract (B).



HCF1/2 (C-19): sc-13432. Western blot analysis of HCF1/2 expression in non-transfected: sc-117752 (A) and human HCF1 transfected: sc-372430 (B) 293T whole cell lysates.

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 **HCF1 (H-8): sc-390950** or **HCF2 (C-6): sc-393250**, our highly recommended monoclonal alternatives to HCF1/2 (C-19).