SANTA CRUZ BIOTECHNOLOGY, INC.

HCF2 (192D3a): sc-81281

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

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 G_1 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.

REFERENCES

1. Johnson, K.M., Mahajan, S.S. and Wilson, A.C. 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., Smith, M.R., Beddall, M. and Sharp, P.A. 2000. A novel 50 kDa fragment of host cell factor 1 (C1) in G_0 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: HCFC2 (human) mapping to 12q23.3.

SOURCE

HCF2 (192D3a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to an internal region of HCF2 of human origin.

PRODUCT

Each vial contains 100 µg IgG_1 in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

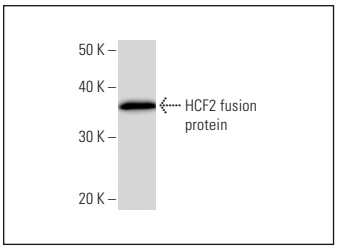
APPLICATIONS

HCF2 (192D3a) is recommended for detection of HCF2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000) and immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Suitable for use as control antibody for HCF2 siRNA (h): sc-37998, HCF2 shRNA Plasmid (h): sc-37998-SH and HCF2 shRNA (h) Lentiviral Particles: sc-37998-V.

Molecular Weight of HCF2: 87 kDa.

DATA



HCF2 (192D3a): sc-81281. Western Blot analysis of human recombinant HCF2 fusion protein.

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.