

EBP2 (C-12): sc-46314

BACKGROUND

The replication and stable maintenance of latent Epstein-Barr virus DNA episomes in human cells requires only one viral protein, Epstein-Barr nuclear antigen 1 (EBNA1). EBNA1 binding protein 2, also designated p40/EBP2, is a nuclear protein required for the processing of the 27S pre-rRNA. EBP2 has high conservation across species and is ubiquitously expressed in human tissues, especially myelogenous leukemia K-562. EBP2 specifically interacts with EBNA1, supporting the long-term maintenance of EBV plasmids in human cells. The EBNA1-EBP2 complex is important for the stable segregation of EBV episomes during cell division.

REFERENCES

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- Henning, D., et al. 2001. Expression of p40/Epstein-Barr virus nuclear antigen 1 binding protein 2. *Biochem. Biophys. Res. Commun.* 283: 430-436.
- Narum, D.L., et al. 2002. A novel *Plasmodium falciparum* erythrocyte binding protein 2 (EBP2/BAEBL) involved in erythrocyte receptor binding. *Mol. Biochem. Parasitol.* 119: 159-168.
- Kapoor, P., 2003. EBNA1 partitions Epstein-Barr virus plasmids in yeast cells by attaching to human EBNA1-binding protein 2 on mitotic chromosomes. *J. Virol.* 77: 6946-6956.
- Sears, J., 2004. The amino-terminus of Epstein-Barr virus (EBV) nuclear antigen 1 contains AT hooks that facilitate the replication and partitioning of latent EBV genomes by tethering them to cellular chromosomes. *J. Virol.* 78: 11487-11505.
- Habel, M.E., et al. 2004. Maintenance of Epstein-Barr virus-derived episomal vectors in the murine Sp2/0 myeloma cell line is dependent upon exogenous expression of human EBP2. *Biochem. Cell Biol.* 82: 375-380.

CHROMOSOMAL LOCATION

Genetic locus: EBNA1BP2 (human) mapping to 1p34.2; Ebna1bp2 (mouse) mapping to 4 D2.1.

SOURCE

EBP2 (C-12) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the C-terminus of EBP2 of human origin.

STORAGE

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

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.

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-46314 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

EBP2 (C-12) is recommended for detection of EBP2 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).

EBP2 (C-12) is also recommended for detection of EBP2 in additional species, including canine and bovine.

Suitable for use as control antibody for EBP2 siRNA (h): sc-45622, EBP2 siRNA (m): sc-45623, EBP2 shRNA Plasmid (h): sc-45622-SH, EBP2 shRNA Plasmid (m): sc-45623-SH, EBP2 shRNA (h) Lentiviral Particles: sc-45622-V and EBP2 shRNA (m) Lentiviral Particles: sc-45623-V.

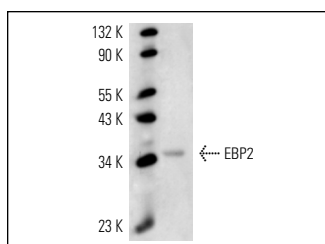
Molecular Weight of EBP2: 35 kDa.

Positive Controls: T24 cell lysate: sc-2292, HeLa whole cell lysate: sc-2200 or HeLa nuclear extract: sc-2120.

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



EBP2 (C-12): sc-46314. Western blot analysis of EBP2 expression in T24 whole cell lysate.

RESEARCH USE

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