



## EBP2 (N-14): sc-46317

### 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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3. 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.
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5. 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.
6. 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.
7. Fu, Y., et al. 2005. Adiponectin promotes adipocyte differentiation, insulin sensitivity, and lipid accumulation. *J. Lipid Res.* 46:1369-1379.
8. Kapoor, P., et al. 2005. EBP2 plays a key role in Epstein-Barr virus mitotic segregation and is regulated by aurora family kinases. *Mol. Cell. Biol.* 25: 4934-4945.
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### CHROMOSOMAL LOCATION

Genetic locus: EBNA1BP2 (human) mapping to 1p35-p33; Ebna1bp2 (mouse) mapping to 4 D2.1.

### SOURCE

EBP2 (N-14) is an affinity purified goat polyclonal antibody raised against a peptide mapping near the N-terminus of EBP2 of human origin.

### RESEARCH USE

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

### 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-46317 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

### APPLICATIONS

EBP2 (N-14) 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), 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).

Suitable for use as control antibody for EBP2 siRNA (h): sc-45622 and EBP2 siRNA (m): sc-45623.

Molecular Weight of EBP2: 35 kDa.

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

### 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.

### 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](http://www.scbt.com) or our catalog for detailed protocols and support products.