EBV EBNA-1 (3EB8): sc-81584

**BACKGROUND**

Epstein-Barr virus, frequently referred to as EBV, is a member of the herpes-virus family and is one of the most common human viruses. Epstein-Barr virus, an agent with growth transforming potential for human B cells, is associated with certain human cancers (e.g. B cell lymphomas and Burkitt’s lymphoma) and one type of epithelial tumor, designated NPC (undifferentiated nasopharyngeal carcinoma). EBV nuclear antigen 1 protein (EBV EBNA-1) is expressed in all EBV-associated tumors, including Burkitt’s lymphoma and nasopharyngeal carcinoma tumors. EBV EBNA-1 is also required for synthesis and maintenance of the Epstein-Barr virus genome. Epstein-Barr virus nuclear antigen 2 (EBV EBNA-2) activates transcription of specific genes and is essential for B lymphocyte transformation. EBV EBNA-2 is specifically bound to a novel nuclear protein, p100, which can co-activate gene expression mediated by the EBV EBNA-2 acidic domain. It is generally accepted that the Epstein-Barr nuclear antigen latent genes EBNA-2, -3A, -3C and -LP, LMP-1 are essential for growth transformation and immortalization of B lymphocytes. EBNA-3A and EBNA-3B co-activation are, at most, 40% that of EBNA-3C.

**REFERENCES**


**SOURCE**

EBV EBNA-1 (3EB8) is a mouse monoclonal antibody raised against Epstein-Barr Virus nuclear antigen 1, with epitope mapping to amino acids 377-458.

**PRODUCT**

Each vial contains 200 µg IgG1 in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

**APPLICATIONS**

EBV EBNA-1 (3EB8) is recommended for detection of EBV EBNA-1 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)].

**RECOMMENDED SECONDARY REAGENTS**

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-mouse IgG-HRP: sc-2005 (dilution range: 1:2000-1:32,000) or Cruz Marker™ compatible goat anti-mouse IgG-HRP: sc-2031 (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).

**RESEARCH USE**

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

**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.