EBV EBNA-1 (1EB6): sc-81580

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, -LP and 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 (1EB6) is a mouse monoclonal antibody raised against Epstein-Barr Virus nuclear antigen 1, with epitope mapping to amino acids 458-641.

PRODUCT

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

APPLICATIONS

EBV EBNA-1 (1EB6) is recommended for detection of EBV EBNA-1 by immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)].

Molecular Weight of EBV EBNA-1: 88 kDa.

RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

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 for detailed protocols and support products.

See EBV EBNA-1 (1EB12): sc-81581 for EBV EBNA-1 antibody conjugates, including AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647.