

EBV-EBNA1 Mosaic (residues 1-90, 408-498)

Epstein-Barr Virus Nuclear Protein 1
recombinant, *E. coli*

Cat. No.	Amount
PR-1223	100 µg

For *in vitro* use only
Quality guaranteed for 12 months
Store at -20°C

Avoid freeze / thaw cycles

Form

Liquid. Supplied in 50 mM Tris-HCl pH 8.0, 10 mM glutathione, 60 mM NaCl and 0.5% sarcosyl.

Application

Antigen in ELISA and Western blots, excellent antigen for detection of HHV-4 (EBV) with minimal specificity problems.

Specificity

Immunoreactive with all sera of EBV infected individuals.

Molecular Weight

46 kDa

Purity

>95% by SDS-PAGE

Description

This protein does contain a GST-tag.
The mosaic protein contains fragments of HHV-4 EBNA1 nuclear protein, amino acids: 1-90 and 408-498.
The protein is purified by proprietary chromatographic technique.

Background

The Epstein-Barr virus (EBV), a gamma herpesvirus, persists in B lymphocytes for the life of the host. EBNA1 (Epstein-Barr virus nuclear antigen 1) is expressed in every form of EBV-related malignancy, including posttransplant lymphomas. Tumors such as nasopharyngeal cell carcinoma, Hodgkin's lymphoma, and Burkitt's lymphoma (BL) that fail to express some or all of the dominant CD8⁺ T-cell latent antigens still express EBNA1. A significant proportion of memory CD4⁺ T-cells that recognize lymphoblastoid cell lines (LCLs) are directed against the EBNA1 protein.
The EBNA1 protein contains a glycine-alanine repeat that prevents proper processing and presentation through the major histocompatibility complex class I (MHC I) pathway.

Selected References:

- Avolio-Hunter *et al.* (2003) EBNA1 efficiently assembles on chromatin containing the Epstein-Barr virus latent origin of replication. *Virology*. **315**:398.
- Nikiforow *et al.* (2003) Cytolytic CD4(+)-T-cell clones reactive to EBNA1 inhibit Epstein-Barr virus-induced B-cell proliferation. *J. Virol.* **77**:12088.
- Yin *et al.* (2003) Self-inhibition of synthesis and antigen presentation by Epstein-Barr virus-encoded EBNA1. *Science*. **301**:1371.
- Jones *et al.* (2003) Epstein-Barr virus nuclear antigen 1 (EBNA1) induced cytotoxicity in epithelial cells is associated with EBNA1 degradation and processing. *Virology*. **313**:663.
- Kapoor *et al.* (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.
- Deshpande *et al.* (2002) Lack of expression of the Epstein-Barr Virus (EBV) gene products, EBERs, EBNA1, LMP1, and LMP2A, in breast cancer cells. *Lab. Invest.* **82**:1193.