


**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 general laboratory use.**

**Shipping:** shipped on gel packs

**Storage Conditions:** store at -20 °C

**Additional Storage Conditions:** avoid freeze/thaw cycles

**Shelf Life:** 12 months

**Molecular Weight:** 46 kDa

**Purity:** > 95 % (SDS-PAGE)

**Form:** liquid (Supplied in 10 mM PBS pH 7.6 and 10 mM NaCl)

**Applications:**

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

**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<sup>+</sup> T-cell latent antigens still express EBNA1. A significant proportion of memory CD4<sup>+</sup> 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.

**Specificity:** Immunoreactive with all sera of EBV infected individuals.

**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.