

**BGLF4 Antibody (C-term) Blocking Peptide**  
Synthetic peptide  
Catalog # BP8057b**Specification**

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**BGLF4 Antibody (C-term) Blocking Peptide - Product Information**Primary Accession [P13288](#)**BGLF4 Antibody (C-term) Blocking Peptide - Additional Information**

Gene ID 3783704

**Other Names**

Serine/threonine-protein kinase BGLF4, BGLF4

**Target/Specificity**

The synthetic peptide sequence used to generate the antibody [BP8057b](#) was selected from the C-term region of human BGLF4. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

**Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

**Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

**BGLF4 Antibody (C-term) Blocking Peptide - Protein Information**

Name BGLF4

**Function**

Plays many key roles by phosphorylating several proteins including the viral DNA processivity factor BMRF1, EBNA1 or EBNA2. Modifies the host nuclear envelope structure and induces the redistribution of nuclear envelope-associated proteins by phosphorylating host nucleoporins. Subsequently, promotes the nuclear transport of EBV lytic proteins. Required for efficient lytic DNA replication and release of nucleocapsids from the nucleus. Contributes to the compaction of host cell chromatin in cells undergoing lytic replication, presumably by phosphorylating the host condensin complex and host TOP2A. Induces disassembly of the nuclear lamina by phosphorylating with host LMNA. Phosphorylates substrates involved in capsid assembly and DNA packaging. Facilitates the switch from latent to lytic DNA replication by down-regulating EBNA1 replication function. Phosphorylates the viral immediate-early protein BZLF1 and inhibits its sumoylation by interacting with host SUMO1 and SUMO2. Phosphorylates also host SAMHD1 and thereby counteracts its antiviral effect by reducing its dNTP hydrolase activity.

### **Cellular Location**

Virion tegument. Host nucleus. Note—the protein is present at discrete sites in nuclei, called replication compartments where viral DNA replication occurs

### **BGLF4 Antibody (C-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

- [Blocking Peptides](#)

### **BGLF4 Antibody (C-term) Blocking Peptide - Images**

### **BGLF4 Antibody (C-term) Blocking Peptide - Background**

Protein kinases are enzymes that transfer a phosphate group from a phosphate donor, generally the  $\gamma$  phosphate of ATP, onto an acceptor amino acid in a substrate protein. By this basic mechanism, protein kinases mediate most of the signal transduction in eukaryotic cells, regulating cellular metabolism, transcription, cell cycle progression, cytoskeletal rearrangement and cell movement, apoptosis, and differentiation. With more than 500 gene products, the protein kinase family is one of the largest families of proteins in eukaryotes. The family has been classified in 8 major groups based on sequence comparison of their tyrosine (PTK) or serine/threonine (STK) kinase catalytic domains. The STE group (homologs of yeast Sterile 7, 11, 20 kinases) consists of 50 kinases related to the mitogen-activated protein kinase (MAPK) cascade families (Ste7/MAP2K, Ste11/MAP3K, and Ste20/MAP4K). MAP kinase cascades, consisting of a MAPK and one or more upstream regulatory kinases (MAPKKs) have been best characterized in the yeast pheromone response pathway. Pheromones bind to Ste cell surface receptors and activate yeast MAPK pathway.

### **BGLF4 Antibody (C-term) Blocking Peptide - References**

Smith, R.F., et al., J. Virol. 63(1):450-455 (1989). Baer, R., et al., Nature 310(5974):207-211 (1984).