

# BiP Blocking Peptide



✓ 100 µg  
(100 sections)

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**For Research Use Only. Not For Use In Diagnostic Procedures.**

**Description:** This peptide is used to block BiP (C50B12) Rabbit mAb #3177 reactivity in peptide dot blot protocols.

**Background:** Secretory and transmembrane proteins are synthesized on polysomes and translocated into the endoplasmic reticulum (ER). Inside the ER, these proteins are often modified by disulfide bond formation, amino-linked glycosylation and folding. To help proteins fold properly, the ER contains a pool of molecular chaperones including BiP. BiP was identified as an immunoglobulin heavy chain binding protein in pre-B cells (1,2). It was also found to be induced at the protein level by glucose starvation (3). When protein folding is disturbed inside ER, BiP synthesis is increased. Subsequently, BiP binds to misfolded proteins to prevent them from forming aggregates and assists in proper refolding (4).

**Quality Control:** The quality of the peptide was evaluated by reversed-phase HPLC and by mass spectrometry. The peptide blocks BiP (C50B12) Rabbit mAb #3177 by peptide dot blot.

**Directions for Use:** Use as a blocking reagent to evaluate the specificity of antibody reactivity in peptide dot blot protocols. Recommended antibody dilutions can be found on the relevant product data sheet.

**Entrez Gene ID** #3309  
**UniProt ID** #P11021

**Storage:** Supplied in 20 mM potassium phosphate (pH 7.0), 50 mM NaCl, 0.1 mM EDTA, 1 mg/ml BSA and 5% glycerol. 1% DMSO. Store at -20°C.

**For product specific protocols please see the web page for this product at [www.cellsignal.com](http://www.cellsignal.com).**

**Please visit [www.cellsignal.com](http://www.cellsignal.com) for a complete listing of recommended complementary products.**

**Background References:**

- (1) Wabl, M. and Steinberg, C. (1982) *Proc. Natl. Acad. Sci. USA* 79, 6976–6978.
- (2) Haas, I.G. and Wabl, M. *Nature* 306, 387–389.
- (3) Munro, S. and Pelham, H.R. (1986) *Cell* 46, 291–300.
- (4) Kohno, K. et al. (1993) *Mol. Cell Biol.* 13, 877–890.