

Product Specification Sheet

Human Bacterial/Permeability-Increasing Protein Antibodies and Controls

<input type="checkbox"/> Cat # BPI11-A	Rabbit anti-Human Bacterial/Permeability-Increasing Protein (BPI) IgG, aff. pure	SIZE: 100 ul
<input type="checkbox"/> Cat # BPI11-C	Human Bacterial/Permeability-Increasing Protein (BPI) purified protein control for WB	SIZE: 100 ul

Bactericidal/permeability increasing protein (BPI) is a 456 residue (~55kDa) protein which is part of the innate immune system. BPI was initially identified in neutrophils, but is found in other tissues including the epithelial lining of mucus membranes. It is an endogenous antibiotic protein with potent killing activity against Gram-negative bacteria. It binds to compounds called Lipopolysaccharides produced by Gram-negative bacteria. Lipopolysaccharides are potent activators of the immune system, however BPI at certain concentrations can prevent this activation.

Bacterial/Permeability-Increasing Protein (BPI) is present in the azurophilic granules of polymorphonuclear leukocytes (PMN). BPI is toxic only toward Gram-negative bacteria. This specificity is attributable to the strong attraction of BPI for the Lipopolysaccharides (LPS) in the bacterial envelope. BPI is also an important antigen for anti-neutrophil cytoplasmic autoantibodies (ANCA) in vasculitis.

Source of Antigen and Antibodies

Antigen	Synthetic peptide corresponding to human BPI
Ab Host/type	Rabbit, Polyclonal IgG Aff. pure (Cat# BPI11-A) Supplied in PBS pH 7.4, with 0.01% sodium azide as preservative.
2-Ab	Goat Anti-rabbit IgG-HRP cat # 20320 (AP, biotin, FITC conjugates)
-ve control IgG	#20009-1, Rabbit (non-immune) IgG, purified, suitable for ELISA, Western, IHC as -ve control

Cat#BPI11-C, positive control

Human BPI is purified (>95%, ~55 kda) from human blood. Purified protein for Western blot +ve control (Cat#BPI11-C) is supplied in SDS-PAGE sample buffer (reduced). Load 10 ul/lane of # BPI11-C for good visibility with antibody Cat # BPI11-A. Store at -20oC in suitable size aliquots. SDS may crystallize in cold conditions. It should be re dissolved by warming before taking it from the stock. It should be heated once prior to loading on gels. If the product has been stored for several weeks, then it may be preferable to add 5 ul of fresh 2x sample buffer per 10 ul of the # BPI11-C solution prior to heating and loading on gels. This preparation is not biologically active. It is not suitable for ELISA or other applications where native protein is required. Do not freeze, thaw, or heat repeatedly

Form Form & Storage of Antibodies/Peptide Control

Antibody

100 ul solution lyophilized powder

Buffer: PBS+0.01% azide **Reconstitute powder** 100 ul water

Storage

Short-term: unopened, undiluted vials for less than a week at 4oC.

Long-term: at -20°C or below in suitable aliquots after reconstitution. Do not freeze and thaw and store working, diluted solutions.

Stability: 6-12 months at -20oC or below.

Shipping: 4oC for solutions and room temp for powder.

Recommended Usage

Western Blotting: Assay-dependent dilution (range 1:200-:2000).

ELISA: Assay dependent. (1:1000-10,00; using 100-200 ng antigen/well).

Histochemistry & Immunofluorescence: not tested.

Specificity & Cross reactivity:

This antibody reacts to Human Bacterial/Permeability-Increasing protein.. Cross reactivity with other proteins has not been established.

References: Zhao MH (1993) J. Immunol. 187, 417; Elsbach P (1998) J. Leukocyte Biol. 64, 14-18; Geraldine C (2002) PNAS 99, 3902; Levin M (2000) Lancet 356, 961; Khan AA (1999) Antimicrob. Agents Chemotherapy 43, 758-762.

*This product is for In vitro research use only.

Related material available from ADI

Catalog#	ProdDescription
BPI11-A	Anti-Human Bacterial/Permeability-Increasing Protein (BPI) IgG, aff pure
BPI11-C	Human Bacterial/Permeability-Increasing Protein (BPI) purified protein control for WB
BPI12-M	Monoclonal Anti-Human Bacterial/Permeability-Increasing Protein (BPI) IgG, aff pure
BPI15-N-50	Bacterial/Permeability-Increasing Protein (BPI), Human Neutrophil
BPI11-A	141112P

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