

Product Specification Sheet

Bacterial/Permeability-Increasing Protein (BPI, Cap57/57 Kda antimicrobial protein)

Cat # BPI15-N-50 Bacterial/Permeability-Increasing Protein (BPI), Human Neutrophil **SIZE:** 50 ug

Bactericidal/permeability increasing protein (BPI) is a 456 residue (~50kDa) 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.

Sources of antigen and antibodies

Human BPI (**cat # BPI15-N-50**) is purified (>95%, ~55 kda) from human blood that has been shown by certified tests to be negative for HbsAg and HIV and HCV. However, all precautions must be taken to avoid contamination.

Form & Storage

It is supplied in 50 mM Tris buffer, pH 8.0, with 800 mM NaCl. in liquid (see lot sp concn on the vial) or lyophilized in the same buffer. Store at -70oC. Reconstitute in water at no <100 ug/ml. Lot specific concentrations are provided on the vial.

Stability: 6-12 months at -70oC or below.

General References: (1) 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 Items

Antibodies to BPI,

BPI15-N-50

100818A

India Contact:

Life Technologies (India) Pvt. Ltd.

306, Aggarwal City Mall, Opposite M2K Pitampura, Delhi – 110034 (INDIA). Ph: +91-11-42208000, 42208111, 42208222, Mobile: +91-9810521400, Fax: +91-11-42208444
Email: customerservice@lifetechindia.com Website: www.lifetechindia.com