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Product datasheet for AM26279PU-N

BPI Mouse Monoclonal Antibody [Clone ID: 3F9]

Product data:

Product Type:	Primary Antibodies
Clone Name:	3F9
Applications:	ELISA
Recommended Dilution:	Immunassays (coating and detector).
Reactivity:	Human
Host:	Mouse
Isotype:	IgG1
Clonality:	Monoclonal
Specificity:	The monoclonal antibody 3F9 reacts specifically with full length human natural and recombinant Bactericidal Permeability Increasing protein (BPI). It recognizes only free BPI and does not interact with BPI that has formed a complex with LPS.
Formulation:	PBS State: Purified State: Liquid 0.2 µm filtered Ig fraction Stabilizer: 0.1% bovine serum albumin Preservative: 0.02% sodium azide
Concentration:	lot specific
Purification:	Protein G
Conjugation:	Unconjugated
Storage:	Store at 2 - 8 °C.
Stability:	Shelf life: one year from despatch.
Gene Name:	bactericidal/permeability-increasing protein
Database Link:	Entrez Gene 671 Human P17213

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Background: The antimicrobial protein BPI is a 55 kDa protein found in the primary (azurophilic) granules of human neutrophils and has also been detected on surface of neutrophils, small intestinal and oral epithelial cells. BPI is a bactericidal compound that is present in polymorphonuclear cells (PMN) and in lower levels in the specific granules of eosinophils. BPI possesses high affinity toward the lipid A region of lipopolysaccharides (LPS) that comprise the outer leaflet of the gram-negative bacterial outer membrane. Binding of BPI to the lipid A moiety of LPS exerts multiple anti-infective activities against gram-negative bacteria: 1) cytotoxicity via sequential damage to bacterial outer and inner lipid membranes, 2) neutralization of gram-negative bacterial LPS, 3) opsonization of bacteria to enhance phagocytosis by neutrophils. Airway epithelial cells constitutively express the BPI gene and produce the BPI protein and, therefore, BPI may be a critical determinant in the development of LPS-triggered airways disease. Inflammation induced by LPS possibly contributes to the development of rapid airflow decline, a serious and often fatal complication of hematopoietic cell transplantation. Furthermore, a 21 kDa bioactive recombinant fragment of BPI, rBPI21, was shown to confer a survival advantage against invasive pneumococcal disease by binding to the gram-positive bacterial pathogen, pneumolysin.

Synonyms: CAP57