

## Product datasheet for AM26282BT-N

## OriGene Technologies, Inc.

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## **SLPI Mouse Monoclonal Antibody [Clone ID: 31]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 31

**Applications:** ELISA, IHC, WB

**Recommended Dilution:** Immunohistochemistry on frozen sections: The typical starting working dilution is 1:50.

Immunohistochemistry on paraffin sections (1,3-7): The typical starting working dilution is

1:50.

Immunoassays (1-4).

Western blot: The typical starting working dilution is 1:50.

Reactivity: Human
Host: Mouse

Isotype: IgG1

Clonality: Monoclonal

**Immunogen:** SLPI purified from sputum

**Specificity:** The monoclonal antibody 31 recognizes secretory leukocyte proteinase inhibitor (SLPI).

The reactivity of the antibody with isolated domains of SLPI was evaluated using domains obtained by cleavage using partial acidic hydrolysis. Therefore, monoclonal antibody 31

recognizes also other SLPI cleavage products.

Formulation: PBS

Label: Biotin

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: Biotin

Storage: Store at 2 - 8 °C.

**Stability:** Shelf life: one year from despatch.

**Gene Name:** secretory leukocyte peptidase inhibitor





Database Link: Entrez Gene 6590 Human

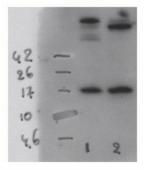
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Background:

SLPI was identified as an alarm reactant and expression is induced by inflammatory factors like LPS, IL1β, TNFα and neutrophils elastase. SLPI is a relatively small basic antiprotease of 11.7 kDa and is a cationic non-glycosylated protein consisting of 107amino acids. SLPI has a high affinity for the neutrophil serine proteinases, elastase and cathepsin G. Orthologues of SLPI have been found in mice, rate, pigs and sheep. It consists of two highly similar WAP ('whey acid protein')/four-disulphide core domains. SLPI contain 16 cysteine residues which assemble into eight disulphide bridges (four in each WAP domain). SLPI is constitutively expressed at many mucosal surfaces and is produced by a variety of epithelial cells, including respiratory, intestinal and amniotic epithelia. Expression is also detected in mast cells, neutrophils and macrophages. Expression of SLPI gene is significantly increased by progesterone and by the pro-inflammatory cytokines TNF-α and IL1-β. Although SLPI has been shown to inhibit a spectrum of proteases (including HNE, cathepsin G, trypsin, chymotrypsin and chymase), its main action in this regard is likely to be the inhibition of elastase, as indicated by its low dissociation constant and favourable kinetics of inhibition for this enzyme. SLPI has been described in several body fluids like seminal fluid, bronchial fluids, cervical fluids and saliva. It has been found to be antibacterial, antifungal, anti-retroviral, and to have an important role in mucosal defence. SLPI might also facilitate tumor spread, contributing to wound healing, is elevated in sepsis and levels seem to correlate with oral candidiasis in HIV-1 positive patients.

Synonyms: SLPI, WAP4, WFDC4

## **Product images:**



IA: mAb can be used as coat and detection (1:1000) mAb

1 = rec. SLPI 100 ng/ml (non-boiled)

2 = BAL (COPD) (non-boiled)

Specimen was fixed in 4% formalin for 4h. Paraffin sections (4µm) were deparifinized, rehydrated and blocked with normal serum. Optional antigen retrieval with citrate buffer. Section was incubated with 5ug/ml mAb