

Datasheet for ABIN2191907
anti-SLPI antibody (Biotin)



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1 Image **6** Publications

Overview

Quantity:	50 µg
Target:	SLPI
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SLPI antibody is conjugated to Biotin
Application:	Western Blotting (WB), Immunoprecipitation (IP), Immunohistochemistry (Paraffin-embedded Sections) (IHC (p)), Flow Cytometry (FACS)

Product Details

Clone:	31
Sterility:	0.2 µm filtered

Target Details

Target:	SLPI
Alternative Name:	Slpi (SLPI Products)
Background:	The monoclonal antibody 31 recognizes secretory leukocyte proteinase inhibitor (SLPI). 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 107 amino acids. SLPI has a high affinity for the neutrophil serine proteinases, elastase and cathepsin G. Orthologues of SLPI have been

Target Details

found in mice, rats, pigs and sheep. It consists of two highly similar WAP ('whey acid protein')/four-disulphide core domains. SLPI contains 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. The reactivity of the antibody 31 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. Aliases human seminal plasma inhibitor I (HUSI-I), cervix uterine secretion inhibitor (CUSI), bronchial inhibitor (BI), antileukoprotease (ALP) and mucous proteinase inhibitor (MPI), Immunogen SLPI purified from sputum

Application Details

Application Notes: For immunohistochemistry and Western blotting, dilutions to be used depend on detection system applied. It is recommended that users test the reagent and determine their own optimal dilutions. The typical starting working dilution is 1:50.

Restrictions: For Research Use only

Handling

Buffer: PBS, containing 0.1 % bovine serum albumin and 0.02 % sodium azide.

Preservative: Sodium azide

Precaution of Use: This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.

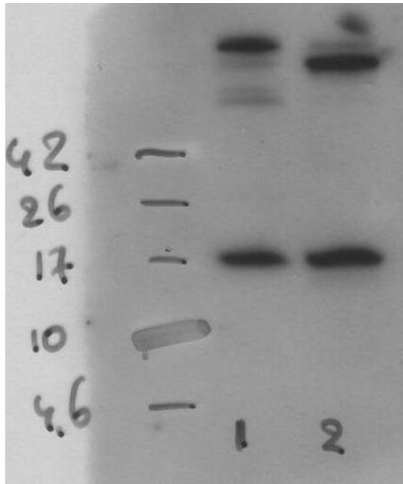
Storage: 4 °C

Storage Comment: Product should be stored at 4 °C. Under recommended storage conditions, product is stable for

at least one year. The exact expiry date is indicated on the label.

Publications

- Product cited in:
- Subramaniam, Hollander, Westin, Erjefält, Stevens, Janciauskiene: "Secretory leukocyte protease inhibitor inhibits neutrophil apoptosis." in: **Respirology (Carlton, Vic.)**, Vol. 16, Issue 2, pp. 300-7, (2011) ([PubMed](#)).
- Cheng, Wang, Huang, Liang, Lin, Hsueh, Wu, Chen, Yu, Lin, Lin: "Overexpression of a secretory leukocyte protease inhibitor in human gastric cancer." in: **International journal of cancer. Journal international du cancer**, Vol. 123, Issue 8, pp. 1787-96, (2008) ([PubMed](#)).
- Bingle, Cross, High, Wallace, Rassi, Yuan, Hellstrom, Campos, Bingle: "WFDC2 (HE4): a potential role in the innate immunity of the oral cavity and respiratory tract and the development of adenocarcinomas of the lung." in: **Respiratory research**, Vol. 7, pp. 61, (2006) ([PubMed](#)).
- Aarbiou, van Schadewijk, Stolk, Sont, de Boer, Rabe, van Krieken, Mauad, Hiemstra: "Human neutrophil defensins and secretory leukocyte proteinase inhibitor in squamous metaplastic epithelium of bronchial airways." in: **Inflammation research : official journal of the European Histamine Research Society ... [et al.]**, Vol. 53, Issue 6, pp. 230-8, (2004) ([PubMed](#)).
- Nakao, Hanada, Asano, Hara, Abdus Salam, Matin, Shimazu, Nakasone, Horibata, Aoba, Honda, Amagasa, Senpuku: "Assessment of oral transmission using cell-free human immunodeficiency virus-1 in mice reconstituted with human peripheral blood leucocyte." in: **Immunology**, Vol. 109, Issue 2, pp. 271-82, (2003) ([PubMed](#)).
- There are more publications referencing this product on: [Product page](#)



Western Blotting

Image 1. 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)