Datasheet for ABIN2191906

anti-SLPI antibody

1 Image | 6 Publications

Go to Product page

Overview

Quantity:	100 µg
Target:	SLPI
Reactivity:	Human
Host:	Mouse
Clonality:	Monoclonal
Conjugate:	This SLPI antibody is un-conjugated
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 107amino 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, 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. 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

Handling

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

Publications

Product cited in:

Vetrano, Rescigno, Cera, Correale, Rumio, Doni, Fantini, Sturm, Borroni, Repici, Locati, Malesci, Dejana, Danese: "Unique role of junctional adhesion molecule-a in maintaining mucosal homeostasis in inflammatory bowel disease." in: **Gastroenterology**, Vol. 135, Issue 1, pp. 173-84, (2008) (PubMed).

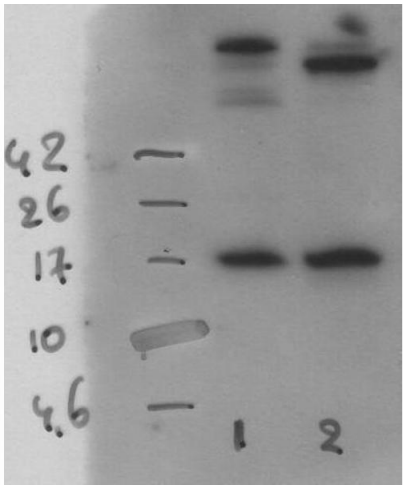
Luo, Zhuo, Fukuhara, Rizzolo: "Effects of culture conditions on heterogeneity and the apical junctional complex of the ARPE-19 cell line." in: **Investigative ophthalmology & visual science**, Vol. 47, Issue 8, pp. 3644-55, (2006) (PubMed).

Faure, Cerini, Paul, Berland, Dignat-George, Brunet: "The uremic solute p-cresol decreases leukocyte transendothelial migration in vitro." in: **International immunology**, Vol. 18, Issue 10, pp. 1453-9, (2006) (PubMed).

Bazzoni, Martinez-Estrada, Orsenigo, Cordenonsi, Citi, Dejana: "Interaction of junctional adhesion molecule with the tight junction components ZO-1, cingulin, and occludin." in: **The Journal of biological chemistry**, Vol. 275, Issue 27, pp. 20520-6, (2000) (PubMed).

There are more publications referencing this product on: Product page

Images



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)