

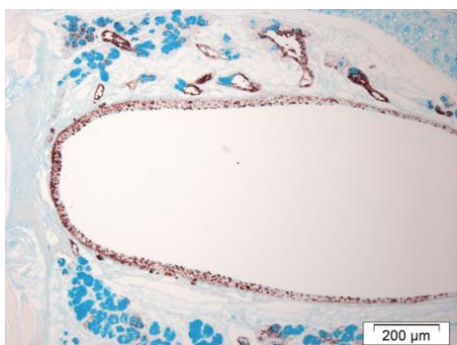
CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	SPLUNC1, Mouse, pAb		
Catalog number	HP8043-20UG		
Lot number	-	Expiry date	-
Volume	200 µl	Amount	20 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 µg/ml
Host Species	Rabbit Ig	Conjugate	None
Endotoxin	N.A.	Purification	Affinity
Storage	4°C		

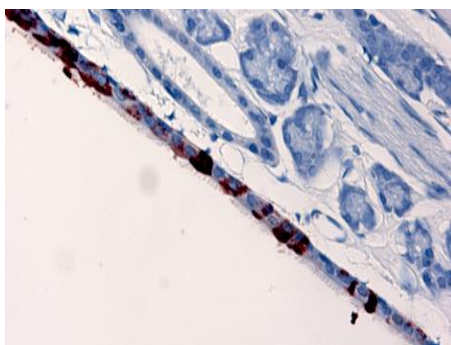
Application notes

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #		1,3,4						2
Yes		•						•
No								
N.D.	•		•	•	•	•	•	

N.D.= Not Determined; IHC = Immuno histochemistry; F = Frozen sections; P = Paraffin sections; IF = Immuno Fluorescence; FC = Flow Cytometry; FS = Functional Studies; IA = Immuno Assays; IP = Immuno Precipitation; W = Western blot



IHC-P: Tissue sections showing the staining of the respiratory epithelium of the trachea with a counterstain of Alcian blue. Image courtesy of Dr. Colin D. Bingle from the University of Sheffield.



IHC-P: Tissue sections showing the staining of the nasal passages with a counterstain of Alcian blue. Image courtesy of Dr. Colin D. Bingle from the University of Sheffield.

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.

- W: A reduced sample treatment and SDS-Page was used. The band size is 50 kDa (Ref.2).
- IHC-P: Tissue sections were pretreated with tri-sodium citrate buffer for 8 minutes in a microwave oven followed by rinsing in PBS. Tissue sections were fixed in 3 % H2O2 in methanol for 20 minutes (Ref.1).
- Positive control: Nasopharyngeal tissues.

General Information

Description	The polyclonal antibody recognizes mouse SPLUNC1 (Short palate, lung and nasal epithelium clone 1). SPLUNC1, also known as known as BPI fold-containing family member A1 (BPIFA1), is an abundant protein present in the airway lining fluid of healthy humans and mice. It is mainly produced by epithelial cells in the lung and tracheobronchial region, the submucosal glands of the trachea, the bronchi, and in specific granules of neutrophils. The protein displays antibacterial activity against Gram-negative bacteria such as <i>P. aeruginosa</i> and is thought to be involved in inflammatory responses to irritants in the upper airways. Additionally, it may also serve as a potential molecular marker for detection of micrometastasis in non-small-cell lung cancer. Its expression is modulated in multiple lung diseases including cystic fibrosis, COPD, respiratory malignancies, and idiopathic pulmonary fibrosis. However, the precise role of SPLUNC1 in pulmonary pathogenesis remains to be elucidated.
Immunogen	Generated against epitope 31-46 (GPPLPLNQGPPLPLNQ).
Aliases	BPI fold-containing family member A1, BPIFA1

References

1. Musa M, Wilson K, Sun L, Mulay A, Bingle L, Marriott HM, LeClair EE, Bingle CD. Differential localisation of BPIFA1 (SPLUNC1) and BPIFB1 (LPLUNC1) in the nasal and oral cavities of mice. Cell Tissue Res. 2012, 350:455.
2. Bingle L, Wilson K, Musa M, Araujo B, Rassl D, Wallace WA, LeClair EE, Mauad T, Zhou Z, Mall MA & Bingle CD. BPIFB1 (LPLUNC1) is upregulated in cystic fibrosis lung disease. Histochemistry and Cell Biology 2012, 138: 749
3. Tadokoro T, Wang Y, Barak LS, Bai Y, Randell SH, Hogan BL. IL-6/STAT3 promotes regeneration of airway ciliated cells from basal stem cells. PNAS 2014, 111:3641
4. Chen H, Matsumoto K, Brockway BL, Rackley CR, Liang J, Lee JH, Jiang D, Noble PW, Randell SH, Kim CF, Stripp BR. Airway epithelial progenitors are region specific and show differential responses to bleomycin-induced lung injury. Stem cells 2012, 30:1948

Storage&stability

Product should be stored at 4°C. Under recommended storage conditions, product is stable for at least one year.

Precautions

For research use only. Not for use in or on humans or animals or for diagnostics. It is the responsibility of the user to comply with all local/state and federal rules in the use of this product. Hycult Biotech is not responsible for any patent infringements that might result from the use or derivation of this product.

We hereby certify that the above-stated information is correct and that this product has been successfully tested by the Quality Control Department. This product was released for sale according to the existing specifications. This document has been produced electronically and is valid without a signature.

Approved by Manager of QC
Brenda Teunissen

Date
15/01/2021

Do you have any questions or comments regarding this product? Please contact us via support@hycultbiotech.com.