

## CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name SPLUNC1, Human, clone 5F5B12

Catalog number HM2314-20UG

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 Mouse IgG1 Conjugate None

Endotoxin N.A. Purification Protein G

Storage 4°C

# **Application notes**

	IHC-F	IHC-P	IF	FC	FS	IA	IP	W
Reference #								
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

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.

Positive control: Airway epithelium in lungs.

### **General Information**

### Description

The monoclonal antibody 5F5B12 recognizes SPLUNC1. The human genome encodes eight different PLUNC (palate, lung, and nasal epithelium associated) proteins that share a predicted structural similarity. The 25 kDa SPLUNC1/BPIFA1 protein was the first identified PLUNC protein and is secreted in human sputum and tracheobronchial secretions, as well as in saliva, nasal lavage fluid, and in specific granules of human neutrophils. The biological function of SPLUNC1/BPIFA is not known, but structural similarities to BPI family proteins suggest that SPLUNC1/BPIFA may be involved in defense responses in the airways. This proposed function is supported by the finding that SPLUNC1 levels are elevated in chronic airway inflammation and that mice overexpressing SPLUNC1/BPIFA exhibit enhanced protection against P. aeruginosa. Moreover, the protein was reported to bind LPS and shown to play and essential role in pulmonary host defense against Klebsiella pneumoniae respiratory infection. The monoclonal antibody, 5F5B12, is specific for SPLUNC1/BPIFA and can be used for ELISA, western blot and immunohistochemistry.

Immunogen Recombinant SPLUNC1

Aliases LUNX, NASG, PLUNC, BPI fold-containing family A member 1, SPURT, Lung-specific protein X, Nasopharyngeal carcinoma-related protein, Palate lung and nasal epithelium clone protein, Secretory protein in upper respiratory tracts,

Short PLUNC1, Tracheal epithelium-enriched protein, Von Ebner protein HI

Cross reactivity Mouse: Yes.

References 1. Gakhar, L et. Al. PLUNC is a novel airway surfactant protein with anti-biofilm activity. PLoS One 2010, 5(2): e9098

 $\textbf{Storage\&stability} \qquad \text{Product should be stored at $4^{\circ}$C. Under recommended storage conditions, product is stable for at least one year.}$ 

Version: 08-2020

#### **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 28/12/2020

Do you have any questions or comments regarding this product? Please contact us via <a href="mailto:support@hycultbiotech.com">support@hycultbiotech.com</a>.