10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

BPIFA1 / PLUNC Antibody (C-Term)

Peptide-affinity purified goat antibody
Catalog # AF3752a

Specification

BPIFA1 / PLUNC Antibody (C-Term) - Product Information

Application	**WB, E**
Primary Accession	Q9NP55
Other Accession	NP_057667.1, 51297
Reactivity	**Human**
Host	**Goat**
Clonality	**Polyclonal**
Concentration	**0.5 mg/ml**
Isotype	**IgG**
Calculated MW	**26713**

BPIFA1 / PLUNC Antibody (C-Term) - Additional Information

Gene ID 51297

Other Names
BPI fold-containing family A member 1, Lung-specific protein X, Nasopharyngeal carcinoma-related protein, Palate lung and nasal epithelium clone protein, Secretory protein in upper respiratory tracts, Short PLUNC1, SPLUNC1, Tracheal epithelium-enriched protein, Von Ebner protein Hl, BPIFA1, LUNX, NASG, PLUNC, SPLUNC1, SPURT

Dilution
WB~~1:1000
E~~N/A

Format
0.5 mg/ml in Tris saline, 0.02% sodium azide, pH7.3 with 0.5% bovine serum albumin

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
BPIFA1 / PLUNC Antibody (C-Term) is for research use only and not for use in diagnostic or therapeutic procedures.

BPIFA1 / PLUNC Antibody (C-Term) - Protein Information

Name BPIFA1

Synonyms LUNX, NASG, PLUNC, SPLUNC1, SPURT

Function
Lipid-binding protein which shows high specificity for the surfactant phospholipid dipalmitoylphosphatidylcholine (DPPC) (PubMed:25223608). Plays a role in the innate immune responses of the upper airways (PubMed:23132494, PubMed:23499554). Reduces the surface tension in secretions from airway epithelia and inhibits the formation of biofilm by pathogenic Gram-negative bacteria, such as P.aeruginosa and K.pneumoniae (PubMed:23132494, PubMed:23499554, PubMed:27145151). Negatively regulates proteolytic cleavage of SCNN1G, an event that is required for activation of the epithelial sodium channel (ENaC), and thereby contributes to airway surface liquid homeostasis and proper clearance of mucus (PubMed:24043776, PubMed:24124190). Plays a role in the airway inflammatory response after exposure to irritants (PubMed:11425234). May attract macrophages and neutrophils (PubMed:23132494).

Cellular Location
Secreted. Note=Apical side of airway epithelial cells. Detected in airway surface liquid, nasal mucus and sputum

Tissue Location
Highly expressed in lung, upper airways and nasopharyngeal regions, including trachea and nasal epithelium (at protein level) (PubMed:11018263, PubMed:11251963, PubMed:11425234, PubMed:12409287, PubMed:26559477). Specifically expressed in the secretory ducts and submucosal glands of tracheobronchial tissues (at protein level) (PubMed:11425234, PubMed:12409287). Also expressed in the eye where it is detected in lacrimal gland, eyelid, conjunctiva and cornea (at protein level) (PubMed:26559477). Specifically localizes to epithelial cell layers in cornea, eyelid (basal epithelium) and conjunctiva (at protein level) (PubMed:26559477). Detected within acinar cells and ducts in the lacrimal and Meibomian glands (at protein level) (PubMed:26559477). In lung, shows highest expression in the trachea and progressive decrease from proximal (bronchial) to distal (bronchiolar) airways (PubMed:12409287). Also expressed in lung cancers and some other types of cancer (PubMed:11251963)

BPIFA1 / PLUNC Antibody (C-Term) - Protocols

Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

BPIFA1 / PLUNC Antibody (C-Term) - Images

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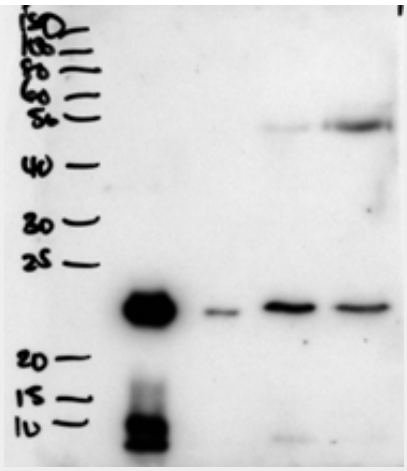

AF3752a (2 µg/ml) staining of secretions from Human primary airway cells in culture (lanes 1 and 2), and in Human Bronchoalveolar Lavage fluid (lanes 3 and 4) . Data obtained from Dr. C Bingle, AURM, University of Sheffield, UK. Primary incubation was 1 hour. Detected by chemiluminescence.

BPIFA1 / PLUNC Antibody (C-Term) - Background

Reported variants represent identical protein: NP_057667.1, NP_001230122.1, NP_570913.1

BPIFA1 / PLUNC Antibody (C-Term) - References

Antimicrobial activity of PLUNC protects against Pseudomonas aeruginosa infection. Lukinskiene L, Liu Y, Reynolds SD, Steele C, Stripp BR, Leikauf GD, Kolls JK, Di YP. J Immunol. 2011 Jul 1;187(1):382-90. PMID: 21632717