

Mouse Anti-Surfactant/SP-C [D3]: MC0076

Intended Use: For Research Use Only

Description: Pulmonary surfactant is a complex mixture of phospholipids and proteins that is secreted from type II cells in alveoli and reduces the surface tension at the alveolar air-liquid interface, providing alveolar stability necessary for normal ventilation. Four distinct proteins isolated from pulmonary surfactant are termed surfactant proteins A, B, C, and D. SP-A (28-36kDa) and SP-D (43kDa) are collagenous carbohydrate-binding proteins, whereas SP-B (8-9kDa) and SP-C (4kDa) are non-collagenous hydrophobic proteins. SP-A is a distinct marker of type II pneumocyte differentiation.

Specifications

Clone:	D3
Source:	Mouse
Isotype:	IgG2a/k
Reactivity:	Human
Immunogen:	Recombinant SP-C Phe24~Ile197 expressed in E.coli
Localization:	Cytoplasm
Formulation:	Antibody in PBS pH7.4, containing BSA and $\leq 0.09\%$ sodium azide (NaN ₃)
Storage:	Store at 2°- 8°C
Applications:	IHC, ICC/IF, WB
Package:	

Description	Catalog No.	Size
Surfactant/SP-C Concentrated	MC0076	1 ml

IHC Procedure

Positive Control Tissue:	Lung
Concentrated Dilution:	10-100
Pretreatment:	Tris EDTA pH9.0, 15 min Pressure Cooker or 30-60 min water bath at 95°-99°C
Incubation Time and Temp:	30-60 minutes @ RT
Detection:	Refer to the detection system manual

* Result should be confirmed by an established diagnostic procedure.

References:

1. Epithelial Expression of an Interstitial Lung Disease Associated Mutation in Surfactant Protein-C Modulates Recruitment and Activation of Key Myeloid Cell Populations in Mice. Alessandro Venosa, et al. J Immunol. Mar 25;202(9):2760–2771, 2019. doi: 10.4049/jimmunol.1900039.
2. A Common mutation in the surfactant protein C gene associated with lung disease. The Journal of Pediatrics 146(3):370-5. March 2005.DOI:10.1016/j.jpeds.2004.10.028
3. Biosynthesis of surfactant protein C: characterization of aggresome formation by EGFP chimeras containing propeptide mutants lacking conserved cysteine residues Available to Purchase. Albert F. Kabore, et al. J of Cell Science. Jan. 15, 2001.