

CERTIFICATE OF ANALYSIS – TECHNICAL DATA SHEET

Product name	SP-C, Human, pAb		
Catalog number	HP9050		
Lot number	-	Expiry date	-
Volume	1 ml	Amount	100 µg
Formulation	0.2 µm filtered in PBS+0.1%BSA+0.02%NaN3	Concentration	100 µg/ml
Host Species	Rabbit IgG	Conjugate	None
Endotoxin	N.A.	Purification	Protein A
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.

General Information

Description The polyclonal antibody recognizes the human surfactant protein C (SP-C). There are four surfactant-specific proteins, designated surfactant protein A (SP-A), SP-B, SP-C and SP-D respectively. SP-A and SP-D are hydrophilic surfactant proteins and are members of the collectin family. SP-B and SP-C are hydrophobic surfactant proteins and may be the most appropriate indicators for the evolutionary origin of surfactant. SP-C is a 34-35 amino acid peptide, of 4 kD that is proteolytically processed from a 21 kD precursor protein. SP-C is initiated early in the embryogenic period of lung formation, where SP-C transcripts are detected uniformly in epithelial cells lining the primitive airways. During lung development SP-C expression is decreased in cells of the proximal conducting portion of the lung. Ultimately SP-C is expressed selectively in type II epithelial cells in the alveolus of the lung. SP-C is secreted into the airspace where it enhances the spreading and stability of surfactant phospholipids in the alveolus. SP-C plays an important role in the spreading and stabilization of phospholipid films in the alveolus. SP-C is essential for air-breathing in mammals and is therefore largely conserved. Deficiency of SP-C and other surfactant components is associated with respiratory distress syndrome (RDS) in premature infants and adults with respiratory distress syndrome (ARDS). The polyclonal antibody is raised against recombinant human pro-SP-C (AA 1-33), GST fusion. The polyclonal antibody is cross reactive with mouse SP-C.

Aliases SFTPC, previously SFTP2, Surfactant Protein C

Cross reactivity Mouse: Yes

- References**
- Ross, G et al; Surfactant protein C in fetal and ventilated preterm rabbit lungs. *AM J Physiol Lung Cell Mol Physiol* 1999, *277*: 1104
 - Nogee, L et al; Allelic heterogeneity in hereditary surfactant protein B (SP-B) deficiency. *Am J Respir Crit Care Med* 2000, *161*: 973
 - Nogee, L et al; A mutation in the surfactant protein C gene associated with familial interstitial lung disease. *NEJM* 2001, *344*: 573
 - Glasser, S et al; Altered stability of pulmonary surfactant in SP-C-deficient mice. *PNAS* 2001, *98*: 6366
 - Glasser, S, et al; Pneumonitis and emphysema in *sp-C* gene targeted mice. *J Biol Chem* 2001, *278*: 14291

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
Robbert Zwinkels

Date
15/03/2018

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