

# PRODUCT INFORMATION



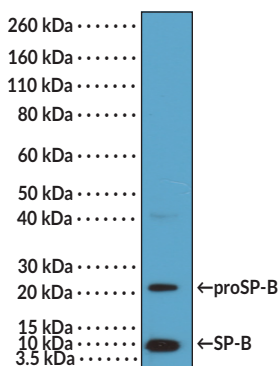
## Surfactant Protein B Rabbit Monoclonal Antibody (Clone RM370)

Item No. 32295

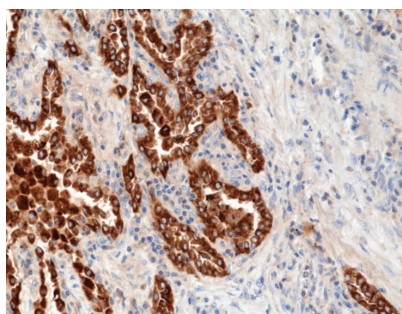
### Overview and Properties

<b>Contents:</b>	This vial contains 100 µl of protein A-affinity purified monoclonal antibody.
<b>Synonym:</b>	SP-B
<b>Immunogen:</b>	Peptide corresponding to residues near the C-terminus of human surfactant protein B
<b>Cross Reactivity:</b>	(+) proSP-B, Surfactant protein B
<b>Species Reactivity:</b>	(+) Human
<b>Form:</b>	Liquid
<b>Storage:</b>	-20°C (as supplied)
<b>Stability:</b>	≥1 year
<b>Storage Buffer:</b>	PBS with 50% glycerol, 1% BSA, and 0.09% sodium azide
<b>Clone:</b>	RM370
<b>Host:</b>	Rabbit
<b>Isotype:</b>	IgG
<b>Applications:</b>	Immunohistochemistry (IHC) and Western blot (WB); the recommended starting dilution is 1:500-1:1,000 for IHC and WB. Other applications were not tested, therefore optimal working concentration/dilution should be determined empirically.

### Images



WB of human lung tissue lysate using Surfactant Protein B Rabbit Monoclonal Antibody (Clone RM370) at a dilution of 1:1,000.



Immunohistochemical staining of formalin-fixed and paraffin-embedded human lung cancer tissue using Surfactant Protein B Rabbit Monoclonal Antibody (Clone RM370) at a dilution of 1:1,000.

**WARNING**  
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**  
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**  
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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## Description

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Surfactant protein B (SP-B) is a hydrophobic surfactant protein and member of the saposin-like family encoded by *SFTBP* in humans.<sup>1</sup> Mature SP-B is a 79-amino acid peptide formed by cleavage of proSP-B that contains three intramolecular disulfide bridges, which stabilize the tertiary structure. SP-B is expressed in alveolar type II cells, functions as a homodimer formed *via* intermolecular disulfide bond formation, and is required for the assembly of pulmonary surfactant, as well as the formation of stable surface-active films at the air-liquid alveolar interface. Blood levels of SB-P are increased in patients with mechanical ventilation- or pulmonary edema-induced acute alveolar cell damage.<sup>1,2</sup> Mutations in *SFTBP* induce SP-B deficiency, an autosomal recessive disorder in infants characterized by progressive hypoxemic respiratory failure in the first year of life.<sup>3</sup> Cayman's Surfactant Protein B Rabbit Monoclonal Antibody (Clone RM370) can be used for immunohistochemistry (IHC) and Western blot (WB) applications.

## References

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1. Banfi, C. and Agostoni, P. Surfactant protein B: From biochemistry to its potential role as diagnostic and prognostic marker in heart failure. *Int. J. Cardiol.* **221**, 456-462 (2016).
2. Dobbe, L., Rahman, R., Elmassry, M., *et al.* Cardiogenic Pulmonary Edema. *Am. J. Med. Sci.* **358(6)**, 389-397 (2019).
3. Wilder, M.A. Surfactant protein B deficiency in infants with respiratory failure. *J. Perinat. Neonatal Nurs.* **18(1)**, 61-67 (2004).

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