ANTIBODYSHOP®

11/09/2008

PRODUCT SPECIFICATION

Anti Surfactant protein A (human, hSP-A)

Mouse monoclonal antibody, biotinylated

Subclass: IgG_1/k

PRODUCT NO.

HYB 238-04 B

PRESENTATION

Preparation:	Biotinylated
Content:	100 µl, 1 mg/mL
Solvent:	0.01 M phosphate buffer, pH 7.4, with 0.14 M NaCl and 15mM sodium azide
Storage:	In the dark at 4-8ºC

ANTIGEN

Surfactant protein A (SP-A) is synthesized and secreted by lung epithelial cells. It belongs to group III of the family of C-type lectins and members of this group has overall structure consisting of multiple globular 'head' regions linked by triple-helical, collagen-like, strands. This group also includes SP-D and the serum proteins mannan-binding protein, conglutinin and collectin-43, all of which have been shown to bind to the C1q receptor found on a wide variety of cells. Both SP-D and SP-A have been shown to enhance oxygen radical production by alveolar macrophages. The serum concentration is 45 ng/ml in healthy individuals (1).

IMMUNOGEN

Native SP-A purified from bronchioaveolar lavage from proteinosis patients

SPECIFICITY

HYB 238-04 is specific for human pulmonary SP-A

EPITOPE SPECIFICITY

Not determined

REACTIVITY

In Western blotting after SDS-PAGE HYB 238-04 reacts with reduced forms of SP-A and weaker with non-reduced forms (3).
In immunohistochemical staining from paraffin embedded tissue samples, HYB 238-04 reacts specifically with human SP-A. Immunoreactivity is seen with alveolar type II cells, nonciliated bronchial cells and a subset of alveolar macrophages. No reactivity in samples from pancreas, intestines, thymus, prostate gland or the peritoneal cavity lining cells (3).
HYB 238-04 reacts strongly with SP-A when tested in ELISA with SP-A directly coated onto the microtiter well.

CULTURE MEDIUM

RPMI 1640 with 10% fetal calf serum

FUSION PARTNER

X63-Ag8.653.

IMMUNIZATION

Female CF1 x BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH)3

APPLICATION

Method	Usability	Dilution guideline	References
ELISA		1:50	
Immunoblotting			
Immunohistochemistry			

The dilution guideline for ELISA is based on sandwich ELISA in combination with a polyclonal antibody against the antigen. Users should determine the optimal dilutions for their own purpose.

REFERENCES

1. Holmskov UL (2000) Collectins and collectin receptors in innate immunity. APMIS Suppl 100:1-59.
2. Johansson J, Curstedt T (1997) Molecular structures and interactions of pulmonary surfactant components. Eur J Biochem 244:675-693.
3. Madsen J, Tornoe I, Nielsen O, Koch C, Steinhilber W, Holmskov U (2003) Expression and localization of lung surfactant protein A in human tissues. Am J Respir Cell Mol Biol 29:591-7.

CONDITIONS

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