

PRODUCT SPECIFICATION

Subclass: IgG₄/k

PS-0125 v01

Anti-Surfactant protein A (human, hSP-A)

Mouse monoclonal antibody

HYB 238-04 Clone: 6F10

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

IMMUNOGEN Native SP-A purified from bronchioaveolar lavage from proteinosis patients

TESTED APPLICATIONS ELISA, WB, IHC-P

SPECIES REACTIVITY

(POSITIVE)

Human

SPECIES REACTIVITY

(NEGATIVE)

CAT. NO.

Not determined

EPITOPE SPECIFICITY Not determined

PRESENTATION

Content: Available in 400 µL and 1 mL size.1 mg/mL +/- 15%. See Certificate of Analysis for details.

Preparation: Protein-A purified

Form: Liquid

Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide

Storage: 4-8°C without exposure to light. No precautions necessary during handling.

APPLICATION ELISA: HYB 238-04 reacts strongly with SP-A when tested in ELISA with SP-A directly coated onto the

nicrotiter well

WB: In Western blotting after SDS-PAGE HYB 238-04 reacts with reduced forms of SP-A and weaker with non-reduced forms. A dilution guideline of 1/1000 has proved successful (2).

IHC: 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 (1, 2).

TARGET 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 health.

REFERENCES 1. Holmskov UL (2000) Collectins and collectin receptors in innate immunity. APMIS Suppl 100:1-59.

2. 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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