

Anti-Surfactant protein D (human, hSP-D)**Mouse monoclonal antibody**Subclass: IgG_{2a}/k

CAT. NO.

HYB 246-04

Clone: 10B2

SPECIFICITY	HYB 246-04 is specific for SP-D from amniotic fluid, serum and bronchioalveolar lavage. HYB 246-04 does not influence SP-D's binding to carbohydrates, but block binding to GP-340.
IMMUNOGEN	Native human SP-D purified from late pregnancy amniotic fluid
TESTED APPLICATIONS	ELISA, WB
SPECIES REACTIVITY (POSITIVE)	Human
SPECIES REACTIVITY (NEGATIVE)	Not determined
EPITOPE SPECIFICITY	Epitope is localized within the C-terminal neck CRD (carbohydrate recognition domain) of SP-D

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 246-04 can be used in ELISA (1, 2, 3).
WB: HYB 246-04 can be used in Western blotting (1).

TARGET

Surfactant protein D (SP-D) 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-A 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 approximately 700 ng/ml in healthy individuals (1).

REFERENCES

1. Leth-Larsen R, Nordenbaek C, Tornoe I, Moeller V, Schlosser A, Koch C, Teisner B, Junker P, Holmskov U (2003) Surfactant protein D (SP-D) serum levels in patients with community-acquired pneumonia. *Clinical Immunology* 108:29-37.
2. Leth-Larsen R, Garred P, Jensenius H, Meschi J, Hartshorn K, Madsen J, Tornoe I, Madsen OH, Sørensen G, Crouch E, Holmskov U (2005) A common Polymorphism in the SFTPD Gene Influences Assembly, Function, and Concentration of Surfactant Protein D. *J Immunol* 174:1532-1538.
3. Sorensen GL, Hoegh SV, Leth-Larsen R, Thomsen TH, Floridon C, Smith K, Kejling K, Tornoe I, Crouch EC, Holmskov U (2009) Multimeric and trimeric subunit SP-D are interconvertible structures with distinct ligand interaction. *Mol Immunol* 46:3060-3069.

CONDITIONS

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