

**Anti Surfactant protein D (human, hSP-D)  
Mouse Monoclonal Antibody**Subclass: IgG<sub>1</sub>/κPRODUCT NO. **HYB 245-02**

PRESENTATION Preparation: Protein-A purified  
Content: 1 ml, 1 mg/mL  
Solvent: 0.01 M phosphate buffer, pH 7.4, with 0.5 M NaCl and 15mM sodium azide  
Storage: In the dark at 4-8°C

ANTIGEN 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 88 ng/ml in healthy individuals (2).

IMMUNOGEN Recombinant neck CRD SP-D

SPECIFICITY HYB 245-02 is specific for human SP-D

EPI TOPE SPECIFICITY Not determined

REACTIVITY In Western blotting after SDS-PAGE HYB 245-02 reacts strongly with SP-D, both in reduced and non-reduced forms. HYB 245-02 only reacts with SP-D in the presence of Ca<sup>++</sup>.

CULTURE MEDIUM Dulbecco's modified Eagle's medium 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)<sub>3</sub>

Method	Usability	Dilution guideline	References
ELISA	Yes	1:1000	
Immunoblotting	Yes	1:3000	
Immunohistochemistry	Yes		1

The dilution guideline for ELISA is based on use as detection antibody on antigen coated directly onto the microtiter well. Users should determine the optimal dilutions for their own purposes.

## REFERENCES

- Holmskov UL (2000) Collectins and collectin receptors in innate immunity. *APMIS Suppl* 100:1-59.
- Holmskov U, Mollenhauer J, Madsen J, Vitved L, Gronlund J, Tornoe I, Kliem A, Reid KB, Poustka A, Skjodt K (1999) Cloning of gp-340, a putative opsonin receptor for lung surfactant protein D. *Proc Natl Acad Sci USA* 96:10794-9.
- Madsen J, Kliem A, Tornoe I, Skjodt K, Koch C, Holmskov U (2000) Localization of lung surfactant protein D on mucosal surfaces in human tissues. *J Immunol* 164:5866-70.
- Johansson J, Curstedt T (1997) Molecular structures and interactions of pulmonary surfactant components. *Eur J Biochem* 244:675-693.

## CONDITIONS

All products are supplied on the understanding that they are for in vitro use only. The information and product are offered without guarantee as the ultimate conditions of use are beyond our control. The animals from which this product was derived have not been exposed to or inoculated with any livestock or poultry disease agents exotic to the United States or Western Europe, and did not originate from facilities where work with exotic disease agents affecting livestock or avian species is carried out.