



Anti α_1 -antitrypsin (human, alpha 1AT)
Mouse Monoclonal Antibody

Subclass: IgG_{2a}/K

PRODUCT NO.

HYB 185-02

PRESENTATION

Preparation: Protein-A/G 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

α_1 -antitrypsin (α -1 AT) is a single polypeptide chain, a typical member of the serine family (serine protease inhibitors), inhibiting the enzyme trypsin. α -1 AT is a glycoprotein synthesized in the liver, and is genetically polymorphic due to the presence of over 20 alleles; individuals appropriately homozygous are deficient in α -1 trypsin and are predisposed to pulmonary emphysema and juvenile hepatic cirrhosis because of alterations in the amino acid and sialic acid components of the glycoprotein (1). The molecular mass of α -1 AT is 51 kDa.

IMMUNOGEN

 α -1 AT isolated from human plasma

SPECIFICITY

HYB 185-02 has specificity for native human α -1 AT

EPI TOPE SPECIFICITY

Epitope specificity differs from that of HYB 191-01.

REACTIVITY

HYB 185-02 reacts strongly with native α -1 AT. Strong reaction is seen in ELISA with native α -1 AT directly coated onto the microtiter well. In Western blotting after SDS-PAGE, HYB 185-02 reacts with native α -1 AT in reduced as well as non-reduced form.

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)₃

APPLICATION

Method	Usability	Dilution guideline	References
ELISA	Yes	1:8000	
Immunoblotting	Yes	1:8000	
Immunohistochemistry	Not determined		

The dilution guideline for ELISA is based on use as detection antibody for antigen coated at 0.1-1 μ g/ml. Users should determine the optimal dilutions for their own purposes.

REFERENCES

1. Stedman's Medical Dictionary (1990) Williams & Wilkins, Baltimore, USA.

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.