

**Anti-Trypsin (human)
Mouse monoclonal antibody**

Subclass: IgG1/k

PRODUCT NO.	HYB 021-03
PRESENTATION	Preparation: Protein-A purified Content: Available in 200 µL and 1 mL volumes, 1 mg/mL Solvent: 0.01 M phosphate buffer, pH 7.4, containing 0.5 M NaCl and 15 mM sodium azide Storage: In the dark at 4-8°C
ANTIGEN	Trypsin is a 24 kDa enzyme and is a member of the serine proteinase family. It is produced in the pancreas as an inactive precursor trypsinogen. The active enzyme is located in the gastrointestinal tract where it degrades proteins to large peptides. Trypsin predominantly cleaves proteins at the carboxyl side of the amino acids lysine and arginine. A common trypsin substrate is chymotrypsinogen which is cleaved to produce active chymotrypsin. High levels of immunoreactive trypsin in the bloodstream can indicate pancreatic malfunction and this indicator is used to screene for and diagnose Cystic Fibrosis (1).
IMMUNOGEN	Trypsin purified from human pancreatic tissue and adsorbed onto aluminum hydroxide gel (2)
SPECIFICITY	HYB 021-03 is specific for human trypsin, trypsinogen and trypsin in complex with alpha-1-antitrypsin. HYB 021-03 cross-reacts weakly with bovine trypsin.
EPI TOPE SPECIFICITY	Epitope differs from that of HYB 021-08
REACTIVITY	HYB 021-03 reacts with human trypsin coated directly onto a microtiter plate and can be used as both a catching and a detection antibody in sandwich ELISA. HYB 021-03 recognizes human trypsin in Western blotting under reducing conditions.
CULTURE MEDIUM	RPMI 1640 with 10% fetal calf serum
FUSION PARTNER	X63-Ag8.653
IMMUNIZATION	Female CF1 x BALB/c mice immunized by intraperitoneal injection

APPLICATION

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

The dilution guideline for ELISA is based on use as detection antibody for human trypsin coated at 10 BAEE units/mL. Users should determine the optimal dilutions for their own purposes.

REFERENCES

1. Crossley JR, Smith PA, Edgar BW, Gluckman PD, Elliott RB (1981) Neonatal screening for cystic fibrosis, using immunoreactive trypsin assay in dried blood spots. Clin Chim Acta 113:111-121
2. Feinstein G, Hofstein R, Koifmann J, Sokolovsky M (1974) Human pancreatic proteolytic enzymes and protein inhibitors. Isolation and molecular properties. Eur J Biochem 43:569-581.

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.