



Anti Hirudin Mouse Monoclonal Antibody

Subclass: IgG₁/k +
IgG2b/k

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| PRODUCT NO. | HYB 010-02 |
| 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 | Hirudin is a highly effective and very specific anticoagulant which specifically inhibits formation of fibrin and activation of factors V, VIII and XIII by forming irreversible, noncovalent 1:1 complexes with a-thrombin. Hirudin is a 7 kDa protein naturally originating from the medical leech <i>Hirudo medicinalis</i> . |
| IMMUNOGEN | Recombinant hirudin (rHV2) produced in <i>S. cerevisiae</i> and coupled to diptheria toxoid. |
| SPECIFICITY | The affinity (Kd) of HYB 010-02 for rHV2K47 is 3.5x10E-8 M (1). Crossreactivity to hirudin added to rabbit, rat, dog and monkey plasma. |
| EPI TOPE SPECIFICITY | The epitope of HYB 010-02 is located at the C-terminal part of hirudin. It differs from that of HYB 010-05 and HYB 010-06 as determined by sandwich ELISA. |
| REACTIVITY | In Western blotting after SDS-PAGE, HYB 010-02 reacts with full length and C-terminal derivatized hirudins in both reduced and unreduced forms. HYB 010-02 is suitable as capture antibody in sandwich ELISA with HYB 010-06 as detection antibody on hirudin from plasma or urine (1). Binding of HYB 010-02 to hirudin inhibits the interaction with a-thrombin. |
| CULTURE MEDIUM | Dulbecco's modified Eagle's medium with 10% fetal calf serum |
| FUSION PARTNER | X63-Ag8.653 |
| IMMUNIZATION | Female BALB/c mice immunized i.p. with immunogen adsorbed onto Al(OH) ₃ |

APPLICATION

| Method | Usability | Dilution guideline | References |
|----------------------|----------------|--------------------|------------|
| ELISA | Yes | 1:4000 | 1 |
| Immunoblotting | Yes | | 1 |
| Immunohistochemistry | Not determined | | |

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

- Koch C, Whitechurch O, Cordier P, Roitsch C (1993) Anti-hirudin monoclonal antibodies directed toward discontinuous epitopes of the hirudin amino-terminal and epitopes involving the carboxy-terminal hirudin amino acids. *Anal Biochem* 214:301-312.
- Skrzypczak-Jankun E, Carperos VE, Ravichandran KG, Tulinsky A, Westbrook M, Maraganore JM (1991) Structure of the hirugen and hirulog 1 complexes of alpha-thrombin. *J Mol Biol* 221:1379-1393.
- Rydel TJ, Tulinsky A, Bode W, Huber R (1991) Refined structure of the hirudin-thrombin complex. *J Mol Biol* 221:583-601.

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.