

Catalog No. LF-MA0171

MONOCLONAL ANTIBODY



## Anti-Prothrombin precursor (coagulation factor II)(28H5)

**Background :** Prothrombin precursor is synthesized in liver as a precursor of prothrombin containing a signal sequence and a propeptide domain at the N-terminus. Before its secretion into plasma, this precursor undergoes several posttranslational modifications, including removal of signal sequence and propeptide domains, glycosylation, and  $\gamma$ -glutamyl-carboxylation reaction. Prothrombin, cleaved by the prothrombinase enzyme complex that consists of serine protease factor Xa, cofactor Va, phospholipids and calcium, is converted to thrombin which converts fibrinogen into fibrin which in turn strengthens a protective clot. Activation of prothrombin is crucial in physiological and pathological coagulation. Various rare diseases involving prothrombin(e.g. hypoprothrombinemia) have been described.

**Immunogen :** Protein purified from Human plasma

**Host :** mouse

**Clone number :** 28H5

**Isotype :** IgG2b, k

**Size :** 100  $\mu$ l

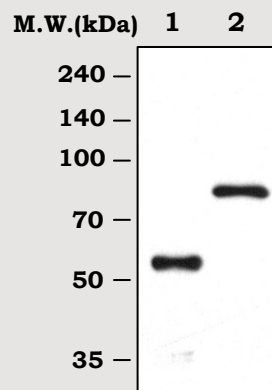
**Compositon :** Hepes with 0.15M NaCl, 0.01% BSA, 0.05% Sodium azide and 50% glycerol

**Positive control :** Protein purified from Human plasma

**Storage :** Store for 1 year at  $-20^{\circ}\text{C}$  from date of shipment

### Species cross reactivity

Human +	Mouse NT	Rat NT
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**Immunoblot Analysis** of human plasma protein

Lane 1 : Prothrombin precursor isolated from human plasma  
Lane 2 : Human plasma

### Applications :

ELISA

Western blotting(1: 2,000)

### Background Reference :

- 1) Zhang P, Suttie JW, Blood 1994; vol.84: 169-75.
- 2) Taylor R, Wallin R, Biochem J. 1991; vol.277(Pt 1): pp.59-65.
- 3) J W Suttie, et al, Proc Natl Acad Sci U S A. 1987; vol.84(3): pp.634-7.

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