MONOCLONAL ANTIBODY



Anti-Complement factor C8 β propeptide(14A10)

Background: The complement system is a part of the larger immune system and three biochemical pathways are present: the classical complement pathway, the alternative pathway, and the mannose-binding lectin pathway.

Human complement factor C8 is one of five components (C5b, C6, C7, C8, and C9) that interact to form the cytolytic membrane attack complex (MAC) which is the cytolytic end product of the complement cascade. MAC is typically formed on the surface of intruding pathogenic bacterial as a result of the activation of the complement system, and it is one of the ultimate weapons of the immune system.

C8 is composed of an α (64 kDa), β (64 kDa), and γ (22 kDa) subunit. Within C8, the subunits are arranged as a disulfide-linked C8 $\alpha\text{-}\gamma$ heterodimer that is noncovalently associated with C8 β . During MAC formation, C8 α mediates binding and self-polymerization of C9 to form a pore-like structure on the membrane of target cells.

Immunogen: Protein purified from

Human plasma

Host: Mouse

Clone number: 14A10

Isotype: IgG1, k

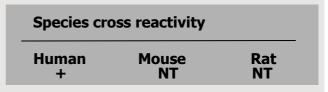
Size: $100 \mu \ell$

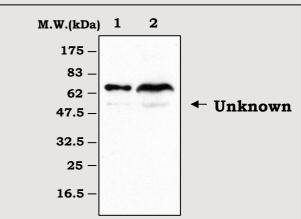
Compositon: Hepes with 0.15M NaCl, 0.01% BSA, 0.03% sodium azide, and 50%

glycerol

Positive control: Human plasma

Storage: Store for 1 year at -20°C from date of shipment.





Immunoblot Analysis of human plasma protein

Lane 1 : Complement factor C8 beta propeptide protein isolated from human plasma

Lane 2: Human plasma

Applications:

ELISA

Western Blotting(1: 2,000)

Immunoprecipitation (1 $\mu \ell / 400 \mu \ell$ cell lysates)

Background Reference:

- 1) Scibek, J.J. et al., 2002, Biochemistry. 41:14546-14551
- 2) Esser, A. F., 1994, Toxicology 87:229-247
- 3) Muller-Eberhard, H. J., 1988, Annu. ReV. Biochem. 57:321-347

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