MONOCLONAL ANTIBODY



Anti-Human IgG(3E8)

Background: Immunoglobulin G (IgG) is a monomeric immunoglobulin, built of two heavy chains y and two light chains. Each molecule has two antigen binding sites. This is the most abundant immunoglobulin and is approximately equally distributed in blood and in tissue liquids. This is the only isotype that can pass through the placenta, thereby providing protection to the fetus in its first weeks of life before its own immune system has developed. It can bind to many kinds of pathogens, for example viruses, bacteria, and fungi, and protects the body against them by complement activation (classic pathway), opsonization phagocytosis and neutralisation of their toxins. There are 4 subclasses: IgG1 (66%), IgG2 (23%), IgG3 (7%) and IgG4 (4%). 1) IgG1, IgG3 and IgG4 cross the placenta easily. 2) IgG3 is the most effective complement activator and IgG4 does not activate complement. 3) IgG1 and IgG3 bind with high affinity to Fc receptors on phagocytic cells. IgG4 has intermediate affinity and IgG2 affinity is extremely low.

Immunogen: Protein purified from Human

plasma

Host: Mouse **Isotype**: IgG1

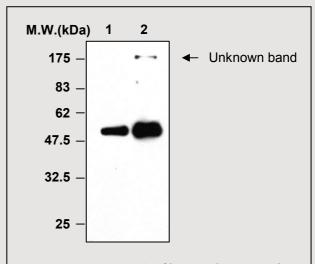
Clone number : 3E8 Size : $100 \mu \ell$

Composition : PBS containing 50% glycerol

Positive control: Human plasma

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

Species cross reactivity Human Mouse Rat + NT NT



Immunoblot Analysis of human plasma protein

Lane 1: IgG isolated from human plasma

Lane 2: Human plasma

Applications:

ELISA

Western blotting (1:5,000)

Immunoprecipitation (0.5 μ ℓ /400 μ ℓ cell lysates) Immunohistochemistry

Background Reference:

- 1) Grubb R. Exp Clin Immunogenet. 1995; vol.12(3): pp.191-7.
- 2) Stewart AK, Schwartz RS. Blood. 1994; vol.83(7): pp.1717-30.

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