

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse Complement Factor H in direct ELISAs and Western blots. In direct ELISAs, less than 5% cross-reactivity with recombinant human Complement Factor H is observed.
Source	Polyclonal Sheep IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant mouse Complement Factor H Ser875-Val1252 Accession # NP_034018
Conjugate	Alexa Fluor 647 Excitation Wavelength: 650 nm Emission Wavelength: 668 nm
Formulation	Supplied 0.2mg/ml in 1X PBS with RDF1 and 0.09% Sodium Azide *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

APPLICATIONS

Please Note: Optimal dilutions should be determined by each laboratory for each application. [General Protocols](#) are available in the Technical Information section on our website.

Western Blot Optimal dilution of this antibody should be experimentally determined.

PREPARATION AND STORAGE

Shipping The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.

Stability & Storage Protect from light. Do not freeze. 12 months from date of receipt, 2 to 8 °C as supplied

BACKGROUND

Factor H is a 155 kDa glycoprotein that provides critical negative regulation of the alternative pathway complement cascade. It is secreted by Kupffer cells, hepatocytes, vascular endothelial cells, and platelets and circulates in the serum at high concentration (1). Factor H is composed of 20 SCR (short consensus repeats), each of which consists of approximately 60 amino acids with four invariant Cys residues (2). Factor H interacts with cell surface polyanions including heparin and sialoglycoproteins (3-6), and immobilized Factor H supports the CD11b/CD18 integrin-dependent adhesion of neutrophils (7). It prevents local complement activation by sequestering complement component C3b, accelerating the decay of C3 and C5 convertases, and functioning as a cofactor for the C3b inactivator, Factor I (1, 3, 6, 8). This recombinant protein corresponds to SCR15-20 which encompass the primary binding sites for heparin and C3b as well as for the peptide hormone adrenomedullin (4, 9-11). Within SCR15-20, mouse Factor H shares 60% and 80% amino acid sequence identity with human and rat Factor H, respectively. Dozens of mutations clustered in SCR15-20 are associated with atypical hemolytic uremic syndrome, a disorder characterized by anemia, thrombocytopenia, and renal failure (12). Binding of Factor H to tumor cell-associated dentin matrix protein 1, bone sialoprotein, or osteopontin results in the protection of that cell from complement mediated lysis (13, 14). A variety of pathogenic microbes also express Factor H binding molecules that interfere with immune clearance of the infection (15).

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