

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human Complement Factor H-related 5/CFHR5 in direct ELISAs and Western blots.
Source	Polyclonal Goat IgG
Purification	Antigen Affinity-purified
Immunogen	Mouse myeloma cell line NS0-derived recombinant human Complement Factor H-related 5/CFHR5 Glu19-Glu569 Accession # Q9BXR6
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details. *Small pack size (-SP) is supplied either lyophilized or as a 0.2 µm filtered solution in PBS.

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.

	Recommended Concentration	Sample
Western Blot	0.1 µg/mL	Recombinant Human Complement Factor H-related 5/CFHR5 (Catalog # 3845-F5)
Immunoprecipitation	25 µg/mL	Conditioned cell culture medium spiked with Recombinant Human Complement Factor H-related 5/CFHR5 (Catalog # 3845-F5), see our available Western blot detection antibodies

PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below. *Small pack size (-SP) is shipped with polar packs. Upon receipt, store it immediately at -20 to -70 °C
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles. <ul style="list-style-type: none"> ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

The human complement factor H protein family consists of the complement and immune regulators factor H, the factor H-like protein 1 (FHL-1) and five factor H-related proteins (FHR-1 to -5) (2). Members of this family are exclusively composed of individually folded protein domains, termed short consensus repeats (SCRs) or complement control modules. The genes of this family have been located in human chromosome 1q32, which is known as the regulator of complement activation (RCA) gene clusters (3). FHR-5 has been identified initially as a universal component of complement deposits (1), and detected in glomerular immune deposits (4). The pattern of deposits is similar to other complement components, suggesting that FHR-5 may play a role in complement activation and regulation. It is synthesized in the liver and consists of 9 SCRs. Its biological function is not understood fully. FHR-5 exhibits similar characteristics as those of factor H in heparin binding, CRP binding, and lipoprotein association (5). Weak factor I-dependent cofactor activity for C3b cleavage has also been observed (5).

References:

1. McRae, J. L. *et al.* (2001) *J. Biol. Chem.* **276**:6747.
2. Zipfel, P. F. *et al.* (2002) *Biochem. Soc. Trans.* **30**:971.
3. McRae, J. L. *et al.* (2002) *Genetica.* **114**:157.
4. Murphy, B. *et al.* (2002) *Am. J. Kidney. Dis.* **39**:24.
5. McRae, J. L. *et al.* (2005) *J. Immunol.* **174**:6250.