

Recombinant Human Complement Factor H/CFH protein (His tag)

Catalog No. PKSH031460

Note: Centrifuge before opening to ensure complete recovery of vial contents.

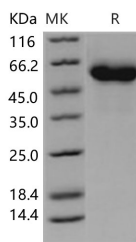
Description

Synonyms	AHUS1, AMBP1, ARMD4, ARMS1, CFHL3, FH, FHL1, HF, HF1, HF2, HUS
Species	Human
Expression Host	HEK293 Cells
Sequence	Ser860-Arg1231
Accession	P08603
Calculated Molecular Weight	43 kDa
Observed molecular weight	60 kDa
Tag	C-His
Bioactivity	Testing in progress

Properties

Purity	> 95 % as determined by reducing SDS-PAGE.
Endotoxin	Please contact us for more information.
Storage	Generally, lyophilized proteins are stable for up to 12 months when stored at -20 to -80°C. Reconstituted protein solution can be stored at 4-8°C for 2-7 days. Aliquots of reconstituted samples are stable at < -20°C for 3 months.
Shipping	This product is provided as lyophilized powder which is shipped with ice packs.
Formulation	Lyophilized from sterile PBS, pH 7.4. Normally 5 % - 8 % trehalose, mannitol and 0.01% Tween80 are added as protectants before lyophilization. Please refer to the specific buffer information in the printed manual.
Reconstitution	Please refer to the printed manual for detailed information.

Data



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Background

Complement factor H, also known as H factor 1, and CFH, is a sialic acid containing glycoprotein that plays an integral role in the regulation of the complement-mediated immune system that is involved in microbial defense, immune complex

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processing, and programmed cell death. Factor H protects host cells from injury resulting from unrestrained complement activation. CFH regulates complement activation on self cells by possessing both cofactor activity for the Factor I mediated C3b cleavage, and decay accelerating activity against the alternative pathway C3 convertase, C3bBb. CFH protects self cells from complement activation but not bacteria/viruses. Due to the central role that CFH plays in the regulation of complement, there are many clinical implications arising from aberrant CFH activity. Mutations in the Factor H gene are associated with severe and diverse diseases including the rare renal disorders hemolytic uremic syndrome (HUS) and membranoproliferative glomerulonephritis (MPGN) also termed dense deposit disease (DDD), membranoproliferative glomerulonephritis type II or dense deposit disease, as well as the more frequent retinal disease age related macular degeneration (AMD). In addition to its complement regulatory activities, factor H has multiple physiological activities and 1) acts as an extracellular matrix component, 2) binds to cellular receptors of the integrin type, and 3) interacts with a wide selection of ligands, such as the C-reactive protein, thrombospondin, bone sialoprotein, osteopontin, and heparin.