



Factor I (KT22): sc-101481

BACKGROUND

The complement pathway is an important host defense system that contributes to both innate and acquired immunity. There are three pathways of complement activation: the classical pathway, lectin pathway and alternative pathway. Complement protein Factor I is a key serine protease that modulates the complement cascade by regulating the levels of C3 convertases. It circulates in plasma as a heavily N-glycosylated heterodimer made up of two disulfide linked chains, each carrying three N-linked oligosaccharide chains that may have both structural and functional roles in the interactions with the natural substrate and the cofactor during catalysis. Factor I is a serine protease with a high degree of specificity for C3b and C4b. It requires protein cofactors for cleavage of these complement proteins; Factor H, CR1 or MCP are required for C3b cleavage, and C4bp or CR1 are required for C4b cleavage.

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CHROMOSOMAL LOCATION

Genetic locus: CFI (human) mapping to 4q25.

SOURCE

Factor I (KT22) is a mouse monoclonal antibody raised against purified Factor I isolated from blood of human origin.

PRODUCT

Each vial contains 100 μ g IgG_{2b} in 1.0 ml PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

Factor I (KT22) is recommended for detection of complement Factor I of human origin by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for Factor I siRNA (h): sc-72081, Factor I shRNA Plasmid (h): sc-72081-SH and Factor I shRNA (h) Lentiviral Particles: sc-72081-V.

Molecular Weight of pro Factor I: 88 kDa.

Molecular Weight of Factor I heavy chain: 50 kDa.

Molecular Weight of Factor I light chain: 38 kDa.

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.