

32-13725: C3b Human

Format : C3b solution contains Phosphate buffered saline, pH 7.2.

Alternative Name : Complement C3, C3 and PZP-like alpha-2-macroglobulin domain-containing protein 1, C3, CPAMD1.

Description

Source: Human Plasma.

Physical Appearance: Sterile filtered solution.

Biological Activity: null

C3b is derived from native C3 upon cleavage with the alternative pathway C3 convertase and release of C3a. Native human C3b is a glycosylated polypeptide chain having 2 disulfide-linked chains. C3b is essential to the function of all 3 complement pathways. Initiation of each pathway generates proteolytic enzyme complexes (C3 convertases) which binds the target surface. These enzymes cleave a peptide bond in C3 releasing the anaphylatoxin C3a and activating C3b. Most of the C3b created during complement activation. Surface-bound C3b is needed in all 3 pathways for effective activation of C5 and formation of C5b-9 complexes which lyse the target cell membrane. Surface-bound C3b and its breakdown products iC3b and C3d are identified by various receptors on lymphoid and phagocytic cells which use the C3b ligand to stimulate antigen presentation to cells of the adaptive immune system. It results in an expansion of target-specific B-cell and T-cell populations.

Human Complement C3b produced in Human plasma having a molecular mass of 176 kDa.

Product Info

Amount : 100 µg / 20 µg

Purification : Greater than 95.0% as determined by SDS-PAGE.

Storage condition : C3b Human is stable at 4°C if entire vial will be used within 2-4 weeks. Store, frozen below -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.