



Complement C5 from Human Plasma

np001101

Storage -80°C. Avoid freeze/thaw cycle.

Introduction

Complement C5 is part of the terminal sequence in the complement pathway. In particular, it is cleaved into C5a and C5b which are responsible for chemotaxis, inflammation, and initiating the formation of the membrane attack complex (MAC). Drugs that inhibit complement C5 have been used in Paroxysmal nocturnal hemoglobinuria (PNH) patients to lessen thrombotic complications by lessening intravascular hemolysis. Complement component C5 is processed by convertase enzymes in a cascade modulated in a unique way. The multi-subunit catalytic complex initially shows little activity against C5, but instead cleaves C3. A C3 cleavage product C3b covalently attaches to the complex and shifts its specificity to C5 by a factor of 1000. Prepared from plasma shown to be non reactive for HBsAg, anti-HCV, anti-HBc, and negative for anti-HIV 1 & 2 by FDA-required tests.

Product Datasheet

Activity:Not tested for biological activity.

Protein Determination:Extinction Coefficient (E) = 1.03 (0.1% at 280 nm, 1 cm pathway).

Testing:Donor material is obtained from suppliers that perform a comprehensive infectious disease screening panel. Each unit of plasma is tested by the supplier and found non-reactive for HIV-1/2, Hepatitis B surface antigen (HBsAg), Hepatitis C (HCV), Hepatitis A (HAV), and syphilis (RPR). Documentation of testing is maintained and is available upon request.