



Human Factor Ba (DAG4682)

This product is for research use only and is not intended for diagnostic use.

PRODUCT INFORMATION

Product Overview	Human Factor Ba (fragment of factor B)
Species	Human
Purity	> 95% by SDS-PAGE
Conjugate	Unconjugated
Applications	Split products of factor B in plasma are indicative of activation of the alternative pathway in vivo. ELISA kits for measurement of Ba and Bb are commercially available. These have been used in numerous human and animal studies.
Format	Frozen liquid
Concentration	1.0 mg/ml (see Certificate of Analysis for actual concentration)
Buffer	Phosphate-buffered saline, pH 7.3
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	Factor Ba is the fragment of complement factor B that results from activation of the alternative pathway. CompTech prepares the factor Ba fragment from factor B which was purified from normal human serum. Complement factor B is a glycosylated protein composed of a single 93,000 Da polypeptide chain. Factor B is an essential component of the alternative pathway of complement activation and is found in plasma at approximately 200 µg/mL. In the presence of Mg++ factor B binds to C3b and the C3b,B complex can be activated by factor D, a serine protease that circulates as an active trypsin-like serine protease. Cleavage of factor B by factor
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D causes the release of the Ba fragment (33,000 Da) and leaves the 60,000 Bb fragment bound to C3b. This Ba fragment comes from the N-terminal of factor B and it contains three CCP domains which interact with C3b. The isolated fragment Ba has been reported to have a weak affinity for C3b and to inhibit the interaction of factor B with C3b thus inhibiting the activation of the alternative pathway. The fragments of factor B (Ba and Bb) have been proposed to elicit several biological responses. See the section titled Function below and in the product description for the Bb fragment.

Keywords

Human Factor Ba; fragment of factor B; Factor Ba
