

Crystallization grade recombinant complement Factor B



orders@immunoprecise.com
www.immunoprecise.com

CAT No. B002

Batch 1671

product specification sheet: PS-B002

0.1 mg

Product description

Complement factor B is a component of the alternative pathway of complement activation. Factor B circulates in the blood as a single chain polypeptide. Upon activation of the alternative pathway, it is cleaved by complement factor D yielding the noncatalytic chain Ba and the catalytic subunit Bb. The active subunit Bb is a serine protease which associates with C3b to form the alternative pathway C3 convertase. Bb is involved in the proliferation of preactivated B lymphocytes, while Ba inhibits their proliferation.

The cDNA coding for Factor B was cloned and expressed in HEK293EBNA1 cells that are deficient in an enzyme that is involved in N-linked glycosylation of glycoproteins. As a result, recombinant factor B produced from this cell line contains N-linked glycans of the short and simple man⁶-GlcNAc⁶ type. Therefore, this factor B is extremely suitable for protein crystallization experiments. Factor B is purified to homogeneity, see Figure 1. It contains an N-terminal hexahistidine tag. Each vial contains 400 µg factor B at a concentration of 16 mg/ml.

Storage and stability

Factor B should be stored at -80 °C (stable for at least 1 year). The buffer contains 25 mM Tris 150 mM NaCl pH 7.5 without preservative. After thawing it should be stored in appropriate small aliquots at -20 °C or -80 °C (stable for at least 2 months).

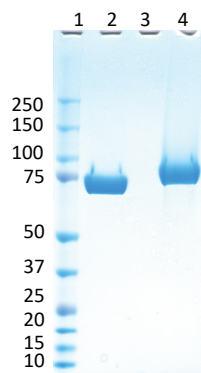


Figure 1. NuPage analysis at 1 mg/ml

Lane 1: marker

Lane 2: Factor B, non reduced

Lane 4: Factor B, reduced

Reference

Factor B structure provides insights into activation of the central protease of the complement system, F.J. Milder, L. Gomes, A. Schouten, B.J.C. Janssen, E.G. Huizinga, R.A. Romijn, W. Hemrika, A. Roos, M.R. Daha and P. Gros, Nature Structural & Molecular Biology, 14, 224 - 228

PRODUCT USE LIMITATIONS, WARRANTY, DISCLAIMER

U-Protein Express BV products contain chemicals which may be harmful if misused. Due care should be exercised with all U-Protein Express BV products to prevent direct human contact. All products are intended For Research Use Only and ARE NOT ALLOWED FOR USE IN HUMANS. Each U-Protein Express BV product is shipped with documentation stating specifications and other technical information. U-Protein Express BV products are warranted to meet or exceed the stated specifications. U-Protein Express BV's sole obligation and the customer's sole remedy is limited to replacement of products free of charge in the event products fail to perform as warranted. U-Protein Express BV makes no other warranty of any kind whatsoever, and SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER WARRANTIES OF ANY KIND OR NATURE WHATSOEVER, DIRECTLY OR INDIRECTLY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, AS TO THE SUITABILITY, PRODUCTIVITY, DURABILITY, FITNESS FOR A PARTICULAR PURPOSE OR USE, MERCHANTABILITY, CONDITION, OR ANY OTHER MATTER WITH RESPECT TO U-Protein Express BV PRODUCTS. In no event shall U-Protein Express BV be liable for claims for any other damages, whether direct, incidental, foreseeable, consequential, or special (including but not limited to loss of use, revenue or profit), whether based upon warranty, contract, tort (including negligence) or strict liability arising in connection with the sale or the failure of U-Protein Express BV products to perform in accordance with the stated specifications.

Version 10/2018