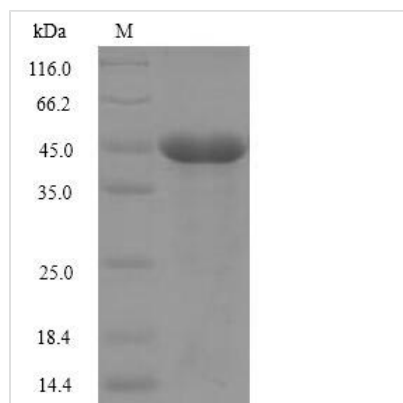




# Recombinant Naja kaouthia Cobra venom factor, partial

<b>Product Code</b>	CSB-EP856221NAFe0
<b>Relevance</b>	Complement-activating protein in cobra venom. It is a structural and functional analog of complement component C3b, the activated form of C3. It binds factor B (CFB), which is subsequently cleaved by factor D (CFD) to form the bimolecular complex CVF/Bb. CVF/Bb is a C3/C5 convertase that cleaves both complement components C3 and C5. Structurally, it resembles the C3b degradation product C3c, which is not able to form a C3/C5 convertase. Unlike C3b/Bb, CVF/Bb is a stable complex and completely resistant to the actions of complement regulatory factors H (CFH) and I (CFI). Therefore, CVF continuously activates complement resulting in the depletion of complement activity.
<b>Abbreviation</b>	Recombinant Naja kaouthia Cobra venom factor protein, partial
<b>Storage</b>	The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.
<b>Uniprot No.</b>	Q91132
<b>Alias</b>	Complement C3 homolog
<b>Product Type</b>	Recombinant Protein
<b>Immunogen Species</b>	Naja kaouthia (Monocled cobra) (Naja siamensis)
<b>Purity</b>	Greater than 90% as determined by SDS-PAGE.
<b>Sequence</b>	DDNEDGFIADSDIISRSDFPKSWLWLTKDLTEEPNSQGISSKTMSFYLRDSITT WVVLAVSFTPTKGICVAEPYEIRVMKVFFIDLQMPYSVVKNEQVEIRAILHNYVN EDIYVRVELLYNPAFCSASTKGQRYRQQFPIKALSSRAVPFVIVPLEQGLHDVEI KASVQEALWSDGVRKKLKVVPEGVQKSIVTIVKLDPRAKGVGGTQLEVIKARK LDDRVPDTEIETKIIQGDPVAQIIENSIDGSKLN
<b>Research Area</b>	Others
<b>Source</b>	E.coli
<b>Expression Region</b>	733-984aa
<b>Notes</b>	Repeated freezing and thawing is not recommended. Store working aliquots at 4°C for up to one week.
<b>Tag Info</b>	N-terminal GST-tagged
<b>Mol. Weight</b>	55.4kDa
<b>Protein Length</b>	Partial
<b>Image</b>	



(Tris-Glycine gel) Discontinuous SDS-PAGE (reduced) with 5% enrichment gel and 15% separation gel.

## Description

Cobra venom factor (CVF) is a protein found in cobra venom that functions as a complement-activating protein [1] [2] [3] [4] [5] [6]. It is structurally and functionally similar to complement component C3b [3] [5]. CVF has been used for decomplexation of serum to investigate the role of complement in various disease model systems [4]. In terms of its main functions, CVF is known to activate the complement system, leading to complement depletion [1] [4]. This protein plays a role in complement activation and complement depletion, resembling the function of C3b [3] [5]. Additionally, CVF has been shown to boost arteriogenesis in mice [7]. Furthermore, CVF is a major functional category represented in the proteome of cervical-vaginal fluid (CVF), emphasizing its significance in the immune response [8] [9].

## References:

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<https://doi.org/10.3390/ijms23158454>

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#### Reconstitution

We recommend that this vial be briefly centrifuged prior to opening to bring the contents to the bottom. Please reconstitute protein in deionized sterile water to a concentration of 0.1-1.0 mg/mL. We recommend to add 5-50% of glycerol (final concentration) and aliquot for long-term storage at -20°C/-80°C. Our default final concentration of glycerol is 50%. Customers could use it as reference.

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#### Shelf Life

The shelf life is related to many factors, storage state, buffer ingredients, storage temperature and the stability of the protein itself. Generally, the shelf life of liquid form is 6 months at -20°C/-80°C. The shelf life of lyophilized form is 12 months at -20°C/-80°C.