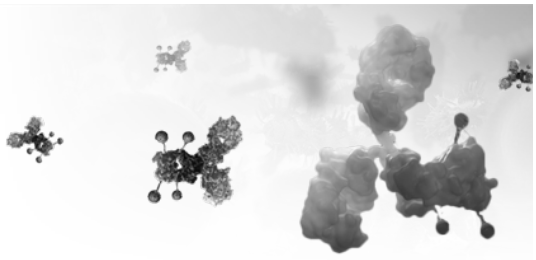

Cobra Venom Factor (DAG4681)

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

PRODUCT INFORMATION

Product Overview	Cobra Venom Factor (CVF)
Species	Cobra
Purity	> 95% by SDS-PAGE (see Certificate of Analysis).
Conjugate	Unconjugated
Applications	CVF has been widely used in animal studies to examine the role of the complement system in disease. Purified CVF has been injected i.p. or i.v. into many animal models (and even humans) to systemically inactivate the complement system for 3-6 days.
Format	Frozen liquid
Concentration	1.0 mg/ml (see Certificate of Analysis for actual concentration)
Size	1 mg
Buffer	10 mM sodium phosphate, 145 mM NaCl, pH 7.2
Preservative	None
Storage	2-8°C short term, -20°C long term

BACKGROUND

Introduction	Many types of venom contain components that activate complement. A major component of cobra venom is CVF which binds to the victim's factor B and this is then activated by factor D forming CVF,Bb. CVF, Bb is a serine protease specific for the victim's C3 and often C5 as well. The activity of this C3/C5 convertase is not affected by the complement regulatory proteins in blood and the complex is extremely stable (half-life approximately 7 hours). It is thought that the

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	release of C3a is important for dilation of the blood vessels near the bite and this aids dispersion of the other venom components. C5a release provides a systemic activation of numerous immune cells and inflammatory reactions. CVF from naja naja kaouthia produces an enzyme that cleaves both human C3 and C5. The affinity of the naja naja kaouthia CVF for C5 is so high that it primarily consumes C5 first, then C3.
Keywords	Venom Factor; Cobra Venom Factor; CVF

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