

Name:	CVF-NHS
Catalog Number:	CVF-NHS
Sizes Available:	1.0 ml/vial
Concentration:	>50 mg/ml (see Certificate of Analysis for exact conc.)
Form:	Frozen liquid
Activity:	<10% C3 and C5 activity versus normal human serum standard
Buffer:	None
Preservative:	None, 0.22 µm filtered
Storage:	-70°C or below. Minimize freeze/thaw cycles.
Source:	Normal human serum (shown by certified tests to be negative for HBsAg and for antibodies to HCV, HIV-1 and HIV-II).
Precautions:	Use normal precautions for handling human blood products.
Origin:	Manufactured in the USA.

General Description

CVF-NHS is generated by activating the complement system in normal human serum with cobra venom factor (CVF) (CompTech #A150) purified from the venom of *Naja naja kaouthia*. 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 ((Rawal, N. and Pangburn, M.K. (2000)).

Physical Characteristics & Structure

CVF-NHS is serum supplied as a clear, straw-colored liquid containing an activated complement system and hence no complement activity. CVF-NHS also contains CVF used for activating the complement system.

Function

CVF-NHS is tested for C3 and C5 activity by hemolytic assays using antibody-sensitized sheep erythrocytes (CompTech #B200) and C3-depleted human serum (Cat #A314) or C5-depleted human serum (Cat #A320). The assays verify that CVF-NHS has < 10% of C3 and C5 activity or >90% consumption of C3 and C5 activity in CVF-NHS when compared to normal human serum standard.

Assays

See Function

Applications

CVF-NHS is a serum source which lacks complement activity due to its consumption upon activation with CVF.

Precautions/Toxicity/Hazards

The source is human serum, therefore precautions appropriate for handling any blood-derived product must be used even though the source was shown by certified tests to be negative for HBsAg and for antibodies to HCV, HIV-1 and HIV-II.

Hazard Code: B WGK Germany 3

MSDS available upon request.

References

Rawal, N. and Pangburn, M.K. (2000) Functional role of the noncatalytic subunit of complement C5 convertase. J. Immunol. 164:1379-1385.

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NOT FOR HUMAN OR DRUG USE.**

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