



Bovine Factor Va

Product No. ADG457

American Diagnostica GmbH

Kaplaneigasse 35 • D-64319 Pfungstadt • Germany
Tel: +49 (0)6157 990899 • Fax: +49 (0)6157 990808

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Description

Factor Va is a cofactor for the serine protease factor Xa, and in the presence of calcium ions they collectively assemble on a phospholipid surface to form the prothrombinase complex. The prothrombinase complex is responsible for the rapid conversion of prothrombin to thrombin. Factor Va is derived from the pro-cofactor, factor V, upon limited proteolysis by alpha-thrombin. Factor Va is prepared by activating purified bovine factor V with thrombin and is subsequently purified by immunoaffinity chromatography.

Properties

The thrombin cleavage of factor V liberates two heavily glycosylated activation peptides from the central portion of the molecule which have no cofactor function. Factor Va is comprised of an NH₂-terminal derived heavy chain (94 kDa) and a COOH-terminal derived light chain (74 kDa) which remain associated in the presence of calcium ions.

Molecular weight: 168,000 Da

Purity: >95%

Extinction coefficient: 17.4

Specific activity: 1500 - 4600 units/mg*

* Specific activity is determined by Factor V clotting assay (PT). One unit of activity is equivalent to the factor V activity in one milliliter of normal plasma

Presentation

1 vial containing 100 µg of protein in a 50% glycerol/H₂O/ 5 mM Calcium Chloride (vol/vol).

Storage and Stability

Store frozen at -20°C. Do **not** subject to freeze-thaw cycles! Spin briefly before opening.

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