

rabbit thrombomodulin

REF 237 Lot No. YYMMDD, Exp. YYYY-MM-DD

Description

REF 237 is purified rabbit lung endothelial cell surface protein ($M_r = 74,000$ D) co-factor for Protein C activation as the thrombin-thrombomodulin- Ca^{++} complex. Rabbit lung thrombomodulin is a more efficient activator of human Protein C than is human thrombomodulin. It is an essential reagent for valid assays of Protein C functional activity in plasma. The thrombomodulin is purified by a multi-step process that includes detergent solubilization from rabbit lung, salt fractionation, ion-exchange chromatography and thrombin-sepharose affinity chromatography.

One unit of thrombomodulin activity is defined as that amount of thrombomodulin required to have maximum activation of human Protein C by 1 NIH unit of thrombin, as determined by inhibition of fibrinogen clotting.

Presentation

Screw-capped plastic tube containing 30 units of activity in 1.0 mL in 20 mM Tris, 150 mM NaCl, pH 7.4, with 0.05% Polidocanol detergent.

Specific Activity

Approximately XXXX units/mg therefore the vial contains approximately XXX μ g of protein.

Storage

Store at -70°C or colder.

Application

In Protein C activation, thrombomodulin must be used at a concentration such that all the thrombin remains complexed in order to avoid clotting. See Reference 2 below.

References

1. Esmon, N. L., *et al.* Isolation of a Membrane-bound Cofactor for Thrombin-catalyzed Activation of Protein C. *Journal of Biological Chemistry* 1982; 257: 859-864.
2. Francis, Jr., R. B. A Simplified PTT-based Protein C Activity Assay using The Thrombin-Thrombomodulin Complex. *Thrombosis Research* 1986, 37: 337-344.

Related Products

Product No. 236, goat anti-rabbit thrombomodulin IgG.

Product No. 2375, monoclonal antibody against human thrombomodulin IgG (inhibitory).

Product No. 2380, Sheep anti-human thrombomodulin IgG.

Product No. 245, PROTAC™ direct Protein C plasma activator from snake venom.

Product No. 837, IMUBIND® Thrombomodulin ELISA.