# EIA for Quantitative Determination of anti-Aprotinin Antibodies



# Introduction

Aprotinin is used in operations to reduce intraoperative and postoperative bleeding tendency. Aprotinin as an allogeneic protein has antigenic properties. It has been shown that formation of IgG antibodies to aprotinin takes place in about 50% of all treated patients. During aprotinin re-exposure allergic reactions may occur due to these preformed anti-aprotinin antibodies. Letal anaphylactic shocks have been described in literature.

This enzyme immunoassay allows the detection of IgG antibodies against aprotinin in human serum. Patients showing positive test results should be excluded from further aprotinin exposure to reduce the risk of allergic reactions. Therefore, this test

system is a valuable contribution to increase the safety of aprotinin applications.

# Principle of the Assay

Aprotinin has been pre-coated onto a microtiter plate. During incubation the anti-aprotinin antibodies are immobilized on the plate. For detection of bound antibodies an enzyme-linked anti-human-lgG anti-body conjugate is added. After washing off any unbound conjugate, a substrate solution is added. The color developing correlates to the amount of bound antibody conjugate. Absorption at 450 nm is proportional to the concentration and/or avidity of anti-aprotinin antibodies.

#### Performance characteristics

Standard curve:

5 standards between 12.5 U/ml and 200 U/ml

Cut off:

15 U/ml

Sample material:

Serum

Intraassay precision (CV):

(n=10)

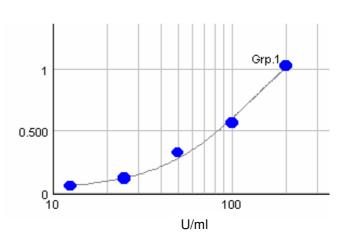
66 U/ml: 8.7% 98 U/ml: 4.5% 195 U/ml: 5.3%

Interassay precision (CV):

(n=10)

62 U/ml: 8.9% 125 U/ml: 15.7%

# **Standard Curve**



# **Assay Procedure**

Incubation of samples/standards/controls	100 μΙ	60 min, room temperature
Wash		
Incubation of HRP-labelled anti-human IgG	100 μΙ	30 min, room temperature
Wash		
Substrate incubation	100 μl/well	15 min, room temperature
Add stop solution	100 μl/well	
Read at 450 nm		

#### Order information

Product	Catalog number	Price (€)
ELISA for quantitative determination of anti-aprotinin antibodies, 1x96 determinations	10100	400

( For in vitro use only

Gentaur Molecular Products Voortstraat 49 1910 Kampenhout, Belgium