

**For research use only. Not for use in diagnostic procedures.**

GpIIb/IIIa Antagonist Reagent

for use as quality control in platelet aggregation function testing

GpIIb/IIIa antagonist reagent kit

REF 08115869 001






Roche Diagnostics GmbH  
Sandhofer Strasse 116  
D-68305 Mannheim, Germany  
www.roche.com

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### Product Description

The GpIIb/IIIa reagent is a liquid reagent containing synthetic GpIIb/IIIa antagonist.

The reagent is employed in combination with the Multiplate® activating reagent TRAPtest, ADPtest, ASPtest and COLtest. Addition of GpIIb/IIIa Antagonist Reagent to a blood sample leads to strongly reduced aggregation in the TRAPtest, ADPtest, ASPtest and COLtest.

### Test principle

The GpIIb/IIIa Antagonist Reagent contains a synthetic inhibitor of the platelet GpIIb/IIIa receptor with a molecular weight of 495 g/mol at a concentration of 50 µg/mL. Blocking the GpIIb/IIIa receptor leads to diminished aggregation in the Multiplate® tests. This allows the assessment of a positive control (strongly inhibited aggregation).

### Material provided

**REF 08115869 001:** 3 vials, each of 0.5 mL.

Liquid reagent containing synthetic GpIIb/IIIa Antagonist: molecular weight 495 g/mol in a concentration of 50 µg/mL.

### Materials required (but not provided)

1. Platelet aggregometer
2. Purified water (distilled or deionized)
3. Aggregometer test cells with stir bars
4. Micropipettes – 0.5 µL to 100 µL required for reagents
5. Pipettes – 100 µL to 1 mL required for blood samples, saline or NaCl/CaCl<sub>2</sub> solution and purified water

6. Physiological saline (NaCl 0.9 %) for irrigation or NaCl/CaCl<sub>2</sub> (REF 08115974 001) for the dilution of whole blood sample
7. TRAPtest (REF 08116679 001)
8. ADPtest (REF 08115761 001)
9. ASPtest (REF 08115826 001)
10. COLtest (REF 08115842 001)

### Instrumentation

The GpIIb/IIIa Antagonist Reagent will perform as described when used on the Multiplate® Analyzer. Follow the manufacturer's instructions.

### Precautions and warnings

The GpIIb/IIIa Antagonist Reagent is for research use only. Not for use in diagnostic procedures. Not for injection or ingestion.

Exercise the normal precautions required for handling all laboratory material.

Disposal of all waste material should be in accordance with local guidelines.

Avoid foam formation in all reagents and sample types.

### Reagent preparation

The reagent is ready for use.

### Storage and stability

Store at 2-8 °C.

The reagents are stable up to the stated expiration date. Vials should be stored in an upright position.

<b>Stability of the reagent after opening:</b>	
at 18-25 °C	27 hours
at 2-8 °C	30 days

Keep all vials tightly closed when not in use. Protect reagent from exposure to light, air and elevated temperature ranges.

### Sample collection

Blood collection should be performed with caution to avoid prolonged venous stasis and using a large-bore needle during draw. Avoid foam formation in the blood collection tube. Gently invert the collection tube 4 to 5 times to ensure complete mixing of the content. Do not freeze or refrigerate samples. Do not preheat the blood before the analysis.

Collect samples into sterile evacuated tubes with non-wettable lining containing 1/10 volume of 3.2 % buffered sodium citrate. Avoid foam formation in the blood collection tube. Always ensure citrated blood collection tubes are filled to the indicated fill volume, in order to avoid excessive citrate levels.

Alternatively, standard lithium-heparin tubes or commercial hirudin blood collection tubes (REF 08128812001) may be used.

The anticoagulant used for blood sample collection significantly affects the results of the test.

The blood collection system must be standardised at each centre. It is only possible to compare the results of an individual sample when the same sample anticoagulant (i.e. citrate, lithium-heparin or hirudin) is employed.

### Test procedure

Refer to the appropriate operator's manual for analyzer-specific assay instructions.

**Example:** TRAPtest with the addition of GpIIb/IIIa Antagonist Reagent.

**Pipette procedures:** Add 20 µL of GpIIb/IIIa Antagonist Reagent into the sample before the addition of the agonist.

<b>Test procedure for TRAPtest and GpIIb/IIIa Antagonist Reagent</b>	
Test procedure for hirudinized and lithium-heparinized blood:	
Saline solution, 0.9 % (prewarmed to 37 °C)	300 µL
GpIIb/IIIa Antagonist Reagent	20 µL
Sample (18-25 °C)	300 µL
Incubation	180 seconds
TRAPtest reagent (reconstituted)	20 µL
Measuring time	6 minutes

**Pipette procedures:** Add 20 µL of GpIIb/IIIa Antagonist Reagent into the sample before the addition of the agonist.

<b>Test procedure for TRAPtest and GpIIb/IIIa Antagonist Reagent</b>	
Test procedure for citrated blood:	
NaCl/CaCl <sub>2</sub> solution (prewarmed to 37 °C)	300 µL
GpIIb/IIIa Antagonist Reagent	20 µL
Sample (18-25 °C)	300 µL
Incubation	180 seconds
TRAPtest reagent (reconstituted)	20 µL
Measuring time	6 minutes

Final concentration: 1.6 µg/mL GpIIb/IIIa Antagonist.

Temperature conditions and incubation times must be precisely observed.

**Note:** It is important that the tip of the micropipette is immersed in the sample when the reagent is injected.

When using the Multiplate® electronic pipette in auto mode follow the test instructions displayed by the Multiplate® software.

### Quality Control

Laboratories should follow generally accepted quality control practices when proficiency testing is not available. A normal blood sample can be used as a control of the activity and stability of the reagent.

### Limitations – interferences

Samples should be analyzed within the period of 0.5-3 hours after blood collection.

The saline solution (NaCl 0.9%) must not contain any additives such as methyl ester.

It is important to pay close attention to temperatures and incubation times. The use of non-preheated saline or NaCl/CaCl<sub>2</sub> solution or the introduction of shorter incubation times may skew results.

### Manufacturer

Roche Diagnostics GmbH  
Sandhofer Strasse 116  
D-68305 Mannheim, Germany  
www.roche.com

### Distributor

DiaPharma Group, Inc.  
8948 Beckett Road  
West Chester, OH 45069-2939  
USA  
www.diapharma.com