

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

ASA Reagent

for use as quality control in platelet aggregation function testing

ASA reagent kit

REF 08115796 001



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Product description

The ASA Reagent (acetylsalicylic acid) is a lyophilised preparation of acetylsalicylic acid, stock concentration 30 mg/mL.

Test principle

ASA Reagent contains acetylsalicylic acid (30 mg/mL). Upon addition to the blood sample the platelet cyclooxygenase pathway is blocked and cyclooxygenase dependent Multiplate® tests are inhibited, especially ASPItest and COLtest. Addition of ASA Reagent to the blood sample leads to reduced aggregation responses in the ASPItest and COLtest.

This allows the assessment of an abnormal response in these tests.

Material provided

REF 08115796 001: 3 vials, each for 1.0 mL. Lyophilized reagent containing acetylsalicylic acid: 30 mg/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/CaCl₂ solution and purified water
6. Physiological saline (NaCl 0.9 %) for irrigation or NaCl/CaCl₂ (**REF 08115974 001**) for the dilution of whole blood sample
7. ASPItest (**REF 08115826 001**)
8. COLtest (**REF 08115842 001**)

Instrumentation

The ASA reagent will perform as described when used on the Multiplate® Analyzer. Follow the manufacturer's instructions.

Precautions and warnings

The ASA Reagent is for research use only. Not for use in diagnostic procedures. Not for injection or ingestion.

This kit contains components classified as follows in accordance with the Regulation (EC) No. 1272/2008



Warning

- H315 Causes skin irritation.
H319 Causes serious eye irritation.
H335 May cause respiratory irritation.

Prevention:

- P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P280 Wear protective gloves.

Response:

- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312 Call a POISON CENTER or doctor/physician if you feel unwell.

- P337 + P313 If eye irritation persists: Get medical advice/attention.

Storage:

- P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

- P501 Dispose of contents/container to an approved waste disposal plant.

Contact phone: all countries: +49-621-7590, USA: 1-800-428-2336

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

Carefully reconstitute the content of one vial of ASA Reagent by adding of 1.0 mL of high purity (distilled or deionized) water. Gently swirl and allow vial to stand closed for 10 minutes at 18-25 °C. Swirl the vial carefully to produce a homogenous solution before use – do not shake! Avoid the formation of foam.

Keep all vials tightly closed when not in use. Minimize exposure to light, air and elevated temperatures.

To achieve maximum stability after reconstitution, pipette ≥ 100 µL aliquots of the reagent into micro test tubes for daily use.

Storage and stability

Store at 2-8 °C.

The lyophilized reagents are stable up to the stated expiration date.

For optimal handling, reconstituted reagent may be aliquoted and the aliquots stored frozen at (-25) - (-15)°C. If reconstituted reagent is not aliquoted into micro test tubes, the original vial should be stored in an upright position. Reconstituted vials should remain tightly closed when not in use.

Stability of the reconstituted reagent:

at 18-25 °C	24 hours
at 2-8 °C	7 days
at (-25) - (-15)°C	4 weeks
after one time thawing at 18-25 °C	24 hours

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 08128812 001) 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.

Test procedure for ASPItest and ASA Reagent	
Test procedure for hirudin-anticoagulated, heparin-anticoagulated, or citrated blood:	
Saline solution, 0.9 % (prewarmed to 37 °C)	300 µL
ASA Reagent (reconstituted)	20 µL
Sample (18-25 °C)	300 µL
Incubation	180 seconds
ASPItest reagent (reconstituted)	20 µL
Measuring time	6 minutes

Test procedure for COLtest and ASA Reagent	
Test procedure for hirudin-anticoagulated or lithium-heparin-anticoagulated blood:	
Saline solution, 0.9 % (prewarmed to 37 °C)	300 µL
ASA Reagent (reconstituted)	20 µL
Sample (18-25 °C)	300 µL
Incubation	180 seconds
COLtest reagent (reconstituted)	20 µL
Measuring time	6 minutes

Test procedure for COLtest and ASA Reagent	
Test procedure for citrated blood:	
NaCl/CaCl ₂ solution (prewarmed to 37 °C)	300 µL
ASA Reagent (reconstituted)	20 µL
Sample (18-25 °C)	300 µL
Incubation	180 seconds
COLtest reagent (reconstituted)	20 µL
Measuring time	6 minutes

During incubation time the cyclooxygenase of the platelets in the sample is inhibited by acetylsalicylic acid. Final concentration: 1 mg/mL acetylsalicylic acid.

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 (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/CaCl₂ diluent solution or the introduction of shorter incubation times may skew results.

Manufacturer

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