SYNTHETIC PROCOAGULANT PHOSPHOLIPIDS

Haematex Research
Bleeding Matters

INTENDED USE

The two 30% DOPS blends show more procoagulant activity than phospholipids extracted from natural biological sources. They are useful in Non Activated Clotting Time (NAPTT) tests for activated clotting factors and procoagulants. Also for specifically bypassing the effect of lupus anticoagulants (LA) in phospholipid correction tests and as platelet lipid substitutes in APTT and dRVVT reagents.

INTRODUCTION

Phospholipids are an essential component in the clotting mechanism. Phosphatidyl serine expressed on activated platelets is particularly important for assembly of clotting factors into their interactive complexes but it does not work well on its own. Procoagulant phospholipid blends are included in most clotting reagents to overcome the effect of variable platelet counts in test plasmas. Di-oleyl phospholipids appear to have highest activities but are susceptible to oxidation and hydrolysis. Our blends contain 0.1% BHT antioxidant.

CONTENTS OF PRODUCT

Blend 1. DOPC:DOPS = 7:3	HTX#	9113	25mg
Blend 2. DOPE:DOPS:DOPC = 5:3:2		9115	25mg
Individual PL:			
Di-Oleyl Phosphatidyl Choline (DOPC)	HTX#	9116	100mg
Di-Oleyl Phosphatidyl Ethanolamine (DOPE)		9117	100mg
Di-Oleyl Phosphatidyl Serine (DOPS)		9118	100mg

All come in 25-100mg vials, sealed under carbon dioxide and ex storage at -50degC. Also available as 10% powders on lactose for better solubility. Shelf life depends on storage temp; Approx. 5yr at -50C; 2yr at -20C; 6mo at 4C; 1mo at 20degC.

INSTRUCTIONS FOR USE

The phospholipids disperse slowly at a 1% level in water, saline, or preferably for better stability, 0.02M HEPES, 0.002M EDTA, pH 7 buffer. Incubate at 37degC for more rapid dispersion. Excess phospholipid solution can be frozen at -20degC or lower temperatures.

APPLICATION

Non Activated Clotting Time (NAPTT) tests for procoagulants:

NOTE: Must be carried out in non contact activating cuvettes, eg polystyrene tubes and unactivated normal plasma.

Disperse “Blend 2” at 1% (eg. 25mg/2.5ml=10mg/ml) in 0.09M sodium chloride 0.06M tris pH 7.5 buffer (diluent) briefly at 37C. Dilute this solution a further 1/500 (eg. 0.01ml/5ml diluent). Mix 0.1ml of this with 0.1ml test sample and 0.1ml normal plasma. Preincubate for 2 minutes at 37C. Then add 0.1ml prewarmed 0.025M calcium chloride and time to a clotting endpoint.

The result with diluent alone as a test sample must be between 200 and 350sec for the test system to be considered valid (abbreviated from European Pharmacopoeia).

Phospholipid Correction tests for Lupus Anticoagulants:

A phospholipid “Blend 2” concentration of 10mg/ml (1% w/v) is suitable for spiking into test plasmas for LA correction with most dRVVT and APTTs. Thus 0.010ml of a 1% dispersion added to 0.5ml of test plasma will provide a final concentration 0.02% which should overcome the effect of most LA.

Clotting test results on plasmas containing LA are usually shortened by addition of phospholipid whereas other coagulation defects are minimally affected.

LIMITATIONS

Note that results may vary with different commercial dRVVT and APTT reagents.

INDEMNITY NOTICE

Follow procedures and refer to precautions that may affect the stated or implied claims and performance of this product. Haematex Research Pty Ltd and its agents or distributors are not liable for damages

FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES

HTX.syn.ppl.110117v4

www.haematex.com | facebook.com/haematex | Suite 9, 17 King Rd. Hornsby NSW 2077 AUSTRALIA
phone: +612 9482 2288 | fax: +612 9482 2288 | email: haematex@tpg.com.au | ABN: 32 108 468 640