

Troubleshooter

Problem	Cause	Solution
Haemolysis	Phlebotomy technique	After cleansing of venipuncture site, allow area to air dry. Never draw blood through a haematoma.
	Tubes where shaken	Directly after blood collection, thorough mixing of the venous blood with the heparin must be achieved by inverting the tube 5-10 times without shaking. Vigorous mixing or shaking of the tubes may lead to haemolysis (pneumatic tube dispatch systems!).
Partial clotting of specimen	Insufficient mixing of tubes.	For inhibition of the coagulability of the obtained venous blood by accelerating the inhibition of factor Xa by antithrombin III, the specimen must come into contact with the heparin by inverting the tube 5-10 times without shaking.
No movement of gel after centrifugation	Too short duration of centrifugation or too low relative centrifugal force	Centrifuge the tubes at 2.200g for 15 minutes. Please note that centrifuges need some time to accelerate the rotor to 2.200g. This acceleration time should be added to the 15 minutes.
	The temperature in the centrifuge is too low	The yield of plasma is ideal at temperatures between 15-24°C. Centrifugation at refrigerated temperatures (4°C) may result in partial or no movement of the gel. Set the temperature between 15-24°C. Please note that tubes stored under refrigerated conditions should be allowed to reach room temperature before blood collection.
Centrifugation is set to '2.200', however gel does not move	Incorrect setting of centrifuge. Centrifuge is set to '2.200' rpm <small>rpm = rotations per minute</small>	Set the relative centrifugal force (rcf) to '2.200'. 2.200g set in centrifuges with a 180mm rotor radius would correspond to approx. 3.500rpm. Please note that a centrifuge set to 2.200 rpm would only produce approx. 1.000g.
Recognizable gel particles in plasma	Re-centrifugation of Plasma Gel Tubes	Do not re-centrifuge Plasma Gel Tubes. The re-centrifugation can lead to impairment of the gel barrier, causing gel particles to separate and appear in the plasma.
Damaged gel barrier	Shock movements or shaking of Plasma Gel Tubes directly after centrifugation	Before sending the tubes by mail or through pneumatic tube dispatch systems, the gel tubes should sit upright for one hour after centrifugation, to minimise the risk of impairing gel barrier through shock movements (shaking).

P03_E, Rev00, 04-2004

Wear gloves during venipuncture and when handling blood collection tubes to minimise exposure hazard.