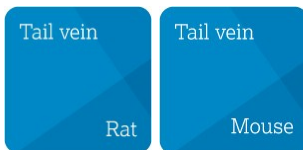


Drummond Plasma Separation Capillary for plasma microsampling

The Drummond Plasma Separation Capillary is a unique device designed to collect blood samples for subsequent centrifugation and separation of plasma. The capillary tubes are 75µl volume and EDTA coated (other anticoagulants and capillaries with marked calibrations are available on request from Drummond Scientific). Each capillary tube contains approximately 2µl of thixotropic gel which acts as an interface between the blood and plasma fractions after centrifugation. A Drummond Wiretrol™ device is used to expel the plasma from the capillary after centrifugation.



Refer to the NC3Rs blood sampling microsite for methods of handling, restraint and blood sampling techniques, for example, for rat and mouse tail vein see the links below. For the Drummond Plasma Separation Capillary a butterfly needle is used for blood sampling.



- Attach the capillary to the butterfly needle
- Allow the capillary to fill completely with blood until the blood touches the white porous plug at the end of the capillary
- When the capillary is completely full (75µl) remove the needle
- Carefully place the animal back in the home cage before continuing with sample processing
- Place filled capillary into a uniquely labelled tube e.g. 2.5ml Micronics tube or any suitable centrifugation tube with a lid/cap
- Centrifuge samples in excess of 1500g for 10 minutes to separate plasma
- After centrifugation use a Drummond Wiretrol™ device to expel the resultant plasma portion into a second uniquely labelled collection tube, taking care not to expel the gel or blood. Seal and store at the required temperature
- Typically 27-30µl of plasma is yielded from this method

References

Bowen CL *et al.* (2013) A novel approach to capillary plasma microsampling for quantitative bioanalysis. *Bioanalysis* 5(9):1131-1135.