



Michigan State University Ocular Melanosis Study

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Important Before Eye Removal

For RNA isolation it is essential that the eye is dissected and placed into an RNA preservation fluid. The RNA suspension fluid will need to be sent out when it is known that a suitable donor eye will become available. This is therefore only possible to do when there is a planned eye removal and there is sufficient time to ship the RNA solution prior to eye removal. To request RNA solution please email:

peter315@msu.edu and **eyeresearch@cvm.msu.edu** with details.

Handling protocol for eyes for RNA extraction

1. Following enucleation, trim off as much of the remaining extraocular tissue as possible from the globe.
2. Observing sterile dissection techniques, make a full-thickness sclera stab incision 3mm posterior to the limbus using a #11 Bard-Parker blade or similar.
3. Advance circumferentially around the globe using tenotomy scissors. It may be necessary to use a pair of forceps to immobilize the eye during this step. Please try to hold the eye by the posterior segment if possible.
4. Remove the anterior segment from the posterior segment. Very gently remove the lens and any remaining vitreous humor that may remain attached to the anterior segment.
5. Deposit the anterior segment into the provided tube of RNA stabilization solution. Make sure that the sample becomes submerged in the solution.
6. Ship sample overnight on ice (or with freezer cooler blocks) to the address above. Include the words, "Please deliver immediately – on ice", and, "exempt animal specimens" on the outside of the package.

We would also like the following:

1. A blood sample (~7ml in EDTA or citrate blood tube)
2. A copy of the dog's pedigree (if available)
3. A copy of the latest OFA eye examination form or any report that you may have about your dog's eye disease.
4. A completed Information form

Many thanks for your help with this project:

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