Laboratory Report

Laboratory #: 27273
Order #: 10994
Ordered By: Timothy Bearden
Ordered: April 25, 2016
Received: May 5, 2016
Reported: May 13, 2016

Call Name: Ember
Registered Name: Golden Ember of The Bearden Pack
Breed: Golden Retriever
Sex: Female
Registration #: SR91601801

Results:

<table>
<thead>
<tr>
<th>Disease</th>
<th>Gene</th>
<th>Genotype</th>
<th>Interpretation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Degenerative myelopathy</td>
<td>SOD1</td>
<td>WT/WT</td>
<td>Normal (clear)</td>
</tr>
<tr>
<td>Ichthyosis (Golden Retriever type)</td>
<td>PNPLA1</td>
<td>WT/WT</td>
<td>Normal (clear)</td>
</tr>
<tr>
<td>Progressive retinal atrophy, Golden Retriever 1</td>
<td>SLC4A3</td>
<td>WT/WT</td>
<td>Normal (clear)</td>
</tr>
<tr>
<td>Progressive retinal atrophy, Golden Retriever 2</td>
<td>TTC8</td>
<td>WT/WT</td>
<td>Normal (clear)</td>
</tr>
<tr>
<td>Progressive retinal atrophy, Progressive rod-cone degeneration</td>
<td>PRCD</td>
<td>WT/WT</td>
<td>Normal (clear)</td>
</tr>
<tr>
<td>Sensory ataxic neuropathy</td>
<td>tRNA-Tyr</td>
<td>WT/WT</td>
<td>Normal (clear)</td>
</tr>
</tbody>
</table>

WT, wild type (normal); M, mutant

Interpretation:

Molecular genetic analysis was performed for six specific mutations reported to be associated with disease in dogs. We identified two normal copies of the DNA sequences in the mutations tested.

Recommendations:

No mutations were identified. Thus, this dog is not at an increased risk for the diseases caused by or associated with the mutations tested. Because this dog is "clear" of these diseases, this dog will only pass the normal genes on to its offspring. Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. Paw Print Genetics™ has genetic counseling available to you at no additional charge to answer any questions about these test results, their implications and potential outcomes in breeding this dog.

Progressive retinal atrophy, Progressive rod-cone degeneration was performed under an exclusive sublicense from OptiGen®, LLC
Normal results do not exclude inherited mutations not tested in these or other genes that may cause medical problems or may be passed on to offspring. These tests were developed and their performance determined by Paw Print Genetics™. This laboratory has established and verified the tests' accuracy and precision. Because all tests performed are DNA-based, rare genomic variations may interfere with the performance of some tests producing false results. If you think these results are in error, please contact the laboratory immediately for further evaluation. In the event of a valid dispute of results claim, Paw Print Genetics will do its best to resolve such a claim to the customer's satisfaction. If no resolution is possible after investigation by Paw Print Genetics with the cooperation of the customer, the extent of the customer's sole remedy is a refund of the fee paid. In no event shall Paw Print Genetics be liable for indirect, consequential or incidental damages of any kind. Any claim must be asserted within 60 days of the report of the test results.