# Washington State University Logo MDR1 GENOTYPING RESULTS

4/6/2012 9:28:53 AM MDR1 - 25055

Heidi Mobley

Submission Type: Brush

Dog Name: (Soup) Western Hills Get Happy

Dog Breed: Australian Shepherd Test Result: Normal/Normal Explanation of test results

## Normal/Normal

These dogs do not carry the mutation, and will not pass on the mutation to their offspring. These dogs would not be expected to experience unexpected adverse drug reactions to normal doses of ivermectin, loperamide (Imodium®), and some anticancer drugs.

#### Mutant/Mutant

These dogs carry the mutation and can not pass on a normal gene to their offspring. These dogs would be expected to experience toxicity after normal doses of loperamide (Imodium®), some anticancer drugs, and high doses of ivermectin (greater than 50 micrograms per kilogram).

## Mutant/Normal

These dogs carry the mutation and may pass on the mutant gene to their offspring. These dogs may experience toxicity after normal doses of loperamide (Imodium®), some anticancer drugs, and high doses of ivermectin (greater than 50 micrograms per kilogram).

A current list of problem drugs for dogs with the MDR1 mutation may be found at this web address:

http://www.vetmed.! wsu.edu/ VCPL

Neal Burke

### **Neal Burke**

Veterinary Clinical Pharmacology Laboratory Manager

\* PCR for this service is performed pursuant to an agreement with Roche Molecular Systems, Inc.

US Patent Number US 6,790,621 B2. Foreign patents pending for MDR1 testing.

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