



FINAL REPORT OF LABORATORY EXAMINATION

4011 Discovery Drive, Columbia, MO 65201

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IDEXX BioResearch Case # 27428-2017

Received: 9/21/2017

Completed: 9/27/2017

Submitted By

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Specimen Description

Species: mouse
Description: Live sentinel mice
Number of Specimens/Animals: 10
Building/Facility: Discovery Ridge

Table with 8 columns: Client ID, Addl ID, Investigator, Room #, Strain /Breed, Sex, Rack, Date Placed. Contains 10 rows of specimen data.

Services/Tests Performed: Rederivation Necropsy Profile

Serologic evaluation for antibodies to: Clostridium piliforme, Mycoplasma pulmonis, CAR bacillus, Ectromelia, EDIM, LCMV, LDEV, MAV1, MAV2, MCMV, MHV, MNV, MPV, MVM, Polyoma, PVM, REO3, Sendai, TMEV, Encephalitozoon cuniculi

PCR evaluation for: Helicobacter bilis, Helicobacter ganmani, Helicobacter hepaticus, Helicobacter mastomyrinus, Helicobacter rodentium, Helicobacter spp., Helicobacter typhlonius, Mycoplasma pulmonis

Parasitologic evaluation for: fur mites, mesostigmatid mites, lice, Spironucleus muris, Giardia muris, large intestinal flagellates and amoeba, pinworms and tapeworms

Microbiologic evaluation for: Citrobacter rodentium, Corynebacterium kutscheri, Klebsiella oxytoca, Klebsiella pneumoniae, Pasteurella multocida, Pasteurella pneumotropica biotype Heyl, Pasteurella pneumotropica biotype Jawetz, Salmonella enterica, Streptococcus pneumoniae

General Comments: Discovery Ridge 2017 Q3 sentinel mice necropsies, 'A' rooms

Summary: All test results were negative. Please see the report for details.

NECROPSY

No gross lesions were detected in any of the body systems and organs examined.

SEROLOGY SUMMARY

	1	2	3	4	5	6	7	8	9	10
CAR bacillus	-	-	-	-	-	-	-	-	-	-
<i>Encephalitozoon cuniculi</i>	-	-	-	-	-	-	-	-	-	-
Ectromelia	-	-	-	-	-	-	-	-	-	-
EDIM	-	-	-	-	-	-	-	-	-	-
LCMV	-	-	-	-	-	-	-	-	-	-
LDEV	-	-	-	-	-	-	-	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-
MAV1	-	-	-	-	-	-	-	-	-	-
MAV2	-	-	-	-	-	-	-	-	-	-
MCMV	-	-	-	-	-	-	-	-	-	-
MHV	-	-	-	-	-	-	-	-	-	-
MNV	-	-	-	-	-	-	-	-	-	-
MPV	-	-	-	-	-	-	-	-	-	-
MVM	-	-	-	-	-	-	-	-	-	-
Polyoma	-	-	-	-	-	-	-	-	-	-
PVM	-	-	-	-	-	-	-	-	-	-
REO3	-	-	-	-	-	-	-	-	-	-
TMEV	-	-	-	-	-	-	-	-	-	-
Sendai	-	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>	-	-	-	-	-	-	-	-	-	-
Mouse IgG	N	N	N	N	N	N	N	N	N	N

Legend: + = positive - = negative blank = test not performed EQ = equivocal HE = hemolysis precluded testing I = insufficient W = weak positive WB = Western Blot confirmatory analysis pending NS = non-specific reactivity N = normal IgG L = less than normal IgG

PCR EVALUATION

feces	1	2	3	4	5	6	7	8	9	10
<i>Helicobacter</i> spp.	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter mastomyrinus</i>	-	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-	-

feces	1	2	3	4	5	6	7	8	9	10
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-	-

oral swab	1	2	3	4	5	6	7	8	9	10
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed wps = weak positive

PARASITOLOGY

	1	2	3	4	5	6	7	8	9	10
parasites	-	-	-	-	-	-	-	-	-	-

MICROBIOLOGY

Specimen/Source: cecum

Isolate	1	2	3	4	5	6	7	8	9	10
<i>Citrobacter rodentium</i>	-	-	-	-	-	-	-	-	-	-
<i>Klebsiella oxytoca</i>	-	-	-	-	-	-	-	-	-	-
<i>Klebsiella pneumoniae</i>	-	-	-	-	-	-	-	-	-	-
<i>Salmonella enterica</i>	-	-	-	-	-	-	-	-	-	-

Specimen/Source: nasopharynx

Isolate	1	2	3	4	5	6	7	8	9	10
<i>Corynebacterium kutscheri</i>	-	-	-	-	-	-	-	-	-	-
<i>Pasteurella multocida</i>	-	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i> biotype Heyl	-	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i> biotype Jawetz	-	-	-	-	-	-	-	-	-	-
<i>Streptococcus pneumoniae</i>	-	-	-	-	-	-	-	-	-	-

Legend: + = agent recovered - = agent not recovered blank = test not performed n = no growth X = Preliminary



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SEROLOGY DETAILS

	Baseline	1	2	3	4	5	6	7	8	9	10
CAR bacillus											
CAR bacillus purified bacteria	MFI > 3.750	-	-	-	-	-	-	-	-	-	-
Encephalitozoon cuniculi											
<i>E. cuniculi</i> purified protozoa	MFI > 1.200	-	-	-	-	-	-	-	-	-	-
Ectromelia											
Ectromelia purified virus	MFI > 2.000	-	-	-	-	-	-	-	-	-	-
EDIM											
EDIM purified virus	MFI > 4.000	-	-	-	-	-	-	-	-	-	-
EDIM VP6 recombinant	MFI > 2.500	-	-	-	-	-	-	-	-	-	-
LCMV											
LCMV recombinant	MFI > 3.000	-	-	-	-	-	-	-	-	-	-
LDEV											
LDEV	MFI > 3.900	-	-	-	-	-	-	-	-	-	-
Mycoplasma pulmonis											
<i>M. pulmonis</i> purified bacteria	MFI > 3.000	-	-	-	-	-	-	-	-	-	-
MAV1											
MAV1 purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-	-
MAV2											
MAV2 purified virus	MFI > 4.500	-	-	-	-	-	-	-	-	-	-
MCMV											
MCMV purified virus	MFI > 3.500	-	-	-	-	-	-	-	-	-	-
MHV											
MHV purified virus	MFI > 2.500	-	-	-	-	-	-	-	-	-	-
MHV NC recombinant	MFI > 2.500	-	-	-	-	-	-	-	-	-	-
MNV											
MNV purified virus	MFI > 2.500	-	-	-	-	-	-	-	-	-	-
MNV VP1 recombinant	MFI > 4.000	-	-	-	-	-	-	-	-	-	-

If you have questions, please call our toll free number at 1-800-669-0825 or e-mail us at idexxbioresearch@idexx.com.

	Baseline	1	2	3	4	5	6	7	8	9	10
MPV											
MPV VP2 recombinant	MFI > 2.000	-	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-	-
MVM											
MVM VP2 recombinant	MFI > 2.000	-	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-	-
Polyoma											
Polyoma purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-	-
PVM											
PVM purified virus	MFI > 2.500	-	-	-	-	-	-	-	-	-	-
REO3											
REO3 purified virus	MFI > 4.900	-	-	-	-	-	-	-	-	-	-
TMEV											
TMEV purified virus	MFI > 2.250	-	-	-	-	-	-	-	-	-	-
RTV purified virus	MFI > 2.750	-	-	-	-	-	-	-	-	-	-
Sendai											
Sendai purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>											
<i>Clostridium piliforme</i> purified bacteria	MFI > 4.950	-	-	-	-	-	-	-	-	-	-

NS1¹: NS1 protein is highly conserved among rodent parvoviruses and thus serves as a generic assay for parvovirus seroconversion.

Legend: + = positive - = negative blank = test not performed EQ = equivocal HE = hemolysis precluded testing I = insufficient W = weak positive WB = Western Blot confirmatory analysis pending NS = non-specific reactivity N = normal IgG L = less than normal IgG

Positive MFI results are reported as "+" followed by a number from 1 to 33 in thousands rounded off to the nearest thousand.

Test Results

Order #: **2017042319**

University of Missouri
(U Missouri OAR)
OAR Room 01
1720 E Campus Drive
Columbia, MO 65201 USA

Charles River Research Animal Diagnostic Services
(CR RADS)
261 Ballardvale Street
Receiving Dock, Bldg 22
Wilmington MA 01887 USA

Billing Information

Payment Method

Standing Purchase PO#: COLUM-C0000343570
Order Exp. 6/2018

University of Missouri
1720 E Campus Drive
Columbia, MO 65201 USA

Details

Sample(s) from: DCRC

Collection Date
20-Sep-2017

Arrival Date
26-Sep-2017

Approval Date
28-Sep-2017

Notes

Disco - Q3 - Mice sentinel PCR "A" rooms

Diagnostic Summary

Test	Colony	Tested	+	+/-	?	PDG
All results NEGATIVE						

+ = Positive, +/- = Equivocal, ? = Indeterminate, PDG = Pending

To assure the SPF status of your research animal colonies, it is essential that you understand the sources, pathobiology, diagnosis and control of pathogens and other adventitious infectious agents that may cause research interference. We have summarized this important information in infectious agent **Technical Sheets**, which you can view by visiting http://www.criver.com/info/disease_sheets.

Test Results

Order #: 2017042319

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Columbia, MO 65201 USA

Charles River Research Animal Diagnostic Services
(CR RADS)
261 Ballardvale Street
Receiving Dock, Bldg 22
Wilmington MA 01887 USA

Sample(s) from: DCRC

Notes

Disco - Q3 - Mice sentinel PCR "A" rooms

Results approved by Magan, Kyria on 28 Sep 2017

Molecular Diagnostics: Infectious Disease PCR

U Missouri Mite and Pinworm Screen PCR

	<u>1</u> 113	<u>2</u> 116
Mite PCR	-	-
Pinworm PCR	-	-

Remarks

- = Negative, +/- = Equivocal; + = Positive; I = Inconclusive.

An equivocal result indicates inconsistent amplification detected by real-time PCR.

Inconclusive indicates failure of control result.

Nucleic Acid Recovery Control (NRC)/Inhibition Control: A low copy exogenous nucleic acid was added to sample lysis prior to nucleic acid isolation to serve as both a control to monitor for nucleic acid recovery and PCR inhibition. An RNA NRC also monitors reverse transcription for RNA virus assays. Nucleic acid recovery and PCR inhibition is monitored by a PCR assay specific for the NRC template. Unless otherwise stated, the control results passed for this order.

Any samples reported as equivocal or positive result in this report has been confirmed by re-extracting nucleic acid and repeating real-time PCR amplification to confirm the initial testing result.

Recommended sample types are essential to accurate results. Missing or inappropriate sample types can effect detection. If this report contains an unexpected result or are unsure of recommended sample types, please call Lab Services (781) 222-6701 before taking any action. Additional or alternative testing may be essential to reaching an accurate diagnosis. We will be glad to test newly submitted samples up to the number of unexpected results in this order.

Test Results

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OAR Room 01
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Columbia, MO 65201 USA

Charles River Research Animal Diagnostic Services
(CR RADS)
261 Ballardvale Street
Receiving Dock, Bldg 22
Wilmington MA 01887 USA

Sample(s) from: DCRC

Notes

Disco - Q3 - Mice sentinel PCR "A" rooms

Sample Information

Number	Code	Species	Colony	Investigator	Facility	Location	Strain	Placem ent Date
1	113	Mouse	DCRC Sentinel	Bryda	Discovery Ridge	W113	CD-1	7/1/17
2	116	Mouse	DCRC Sentinel	Franklin / Bryda	Discovery Ridge	W116	CD-1	7/1/17

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IDEXX BioResearch Case # 27781-2017

**Received: 9/20/2017
Completed: 9/21/2017**

Submitted By

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Referred By

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Fax: [573] 884=7521
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Specimen Description

Species: mouse
Description: 1 mouse fur Mite swab
Number of Specimens/Animals: 1
Building/Facility: Discovery Ridge
Area: W113

ID	Client ID	Investigator	Room #	Sex	Rack
1	W113 fur mite swab Racks 3-6	Bryda	W113	U	3-6

Services/Tests Performed: Fur Mite

PCR evaluation for: *Myocoptes*, *Radfordia*/*Myobia*

General Comments: Quarterly Fur Mite testing 9/2017

Summary: All test results were negative.

PCR EVALUATION

pelt swab	1
<i>Mycoptes</i>	-
<i>Radfordia/Myobia</i>	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed wps = weak positive

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IDEXX BioResearch Case # 27782-2017

Received: 9/20/2017
Completed: 9/21/2017

Submitted By

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Referred By

Craig Franklin
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 Columbia, MO 65201

Fax: [573] 884=7521
 Email: FranklinC@missouri.edu

Specimen Description

Species: mouse
 Description: 2 mouse fur mite swabs
 Number of Specimens/Animals: 2
 Area: Discovery Ridge

ID	Client ID	Investigator	Room #	Sex	Rack
1	W116 Fur Mite swab racks 1-3	Bryda	W116	U	1-3
2	W116 Fur Mite swab Racks 4-6	Bryda	W116	U	4-6

Services/Tests Performed: Fur Mite

PCR evaluation for: *Myocoptes*, *Radfordia*/*Myobia*

General Comments: AOQuarterly fur mite testing.

Summary: All test results were negative.

PCR EVALUATION

pelt swab	1	2
<i>Mycoptes</i>	-	-
<i>Radfordia/Myobia</i>	-	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed wps = weak positive