

FINAL REPORT OF LABORATORY EXAMINATION

4011 Discovery Drive, Columbia, MO 65201

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IDEXX BioAnalytics Case # 37944-2021

Received Date: 12/14/2021

Completed: 12/17/2021

Submitted By

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Referred By

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Specimen Description

Species: mouse

Description: Feces; Pelt Swab

Number of Specimens/Animals: 3

Building/Facility: Discovery Ridge

Client ID	Investigator	Room #	Species	Sex
W113 Pelt Swab and Fecal Pool	Bryda	W113	mouse	M/F
W114 Pelt Swab and Fecal Pool	Bryda	W114	mouse	M/F
W116 Pelt Swab and Fecal Pool	Bryda	W116	mouse	M/F

Services/Tests Performed: Pinworm and Fur Mite Panel (1-3)

PCR evaluation for: *Aspiculuris tetraptera*, *Myocoptes*, *Radfordia/Myobia*, *Syphacia muris*, *Syphacia obvelata*

General Comments: Quarterly pinworm and fur mite testing: W113, W114, and W116, mice, 3 pooled fecal samples and 3 pelt swab samples, KAV

Summary: All test results were negative.

PCR EVALUATION

feces	W113 Pelt Swab and Fecal Pool
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

feces	W114 Pelt Swab and Fecal Pool
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

feces	W116 Pelt Swab and Fecal Pool
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

pelt swab	W113 Pelt Swab and Fecal Pool
<i>Myocoptes</i>	-
<i>Radfordia/Myobia</i>	-

pelt swab	W114 Pelt Swab and Fecal Pool
<i>Myocoptes</i>	-
<i>Radfordia/Myobia</i>	-

pelt swab	W116 Pelt Swab and Fecal Pool
<i>Myocoptes</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 sus = suspect wps = weak positive XX = Testing in progress

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IDEXX BioAnalytics Case # 37351-2021

Received Date: 12/16/2021

Completed: 12/21/2021

Submitted By

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Specimen Description

Species: mouse
 Breed/Strain: CR ATH HE
 Description: Whole Animal
 Number of Specimens/Animals: 11
 Building/Facility: Discovery Ridge

Client ID	Investigator	Room #	Species	Strain /Breed	Sex	Rack	Date Placed
116-A	Franklin	W116	mouse	CR ATH HE	F	1	9/20/2021
116-B	Franklin	W116	mouse	CR ATH HE	F	2	9/20/2021
116-C	Franklin	W116	mouse	CR ATH HE	F	3	9/20/2021
116-D	Franklin/Bryda	W116	mouse	CR ATH HE	F	4	9/20/2021
113-A	Bryda	W113	mouse	CR ATH HE	F	2	9/20/2021
113-B	Bryda	W113	mouse	CR ATH HE	F	3	9/20/2021
113-C	Bryda	W113	mouse	CR ATH HE	F	4	9/20/2021
113-D	Bryda	W113	mouse	CR ATH HE	F	5	9/20/2021
113-E	Bryda	W113	mouse	CR ATH HE	F	6	9/20/2021
114-A	Bryda	W114	mouse	CR ATH HE	F	4	9/20/2021
114-B	Bryda	W114	mouse	CR ATH HE	F	5	9/20/2021

Services/Tests Performed: MU MMRRC Mouse Annual Sentinel Profile (1-11)

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

PCR evaluation for: *Cryptosporidium* spp., *Helicobacter bilis*, *Helicobacter ganmani*, *Helicobacter hepaticus*, *Helicobacter mastomyrinus*, *Helicobacter rodentium*, *Helicobacter* spp., *Helicobacter typhlonius*, *Mycoplasma pulmonis*, *Streptobacillus moniliformis*, *Streptococcus* sp. beta hemolytic Group A, *Streptococcus* sp. beta

hemolytic Group B, *Streptococcus* sp. beta hemolytic Group C, *Streptococcus* sp. beta hemolytic Group G

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

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

General Comments: Discovery Ridge - 2021 Q4 'A' room mouse sentinel necropsies

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

	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
MTV	-	-	-	-	-	-	-	-	-
CAR bacillus	-	-	-	-	-	-	-	-	-
<i>Encephalitozoon cuniculi</i>	-	-	-	-	-	-	-	-	-
Ectromelia	-	-	-	-	-	-	-	-	-
EDIM	-	-	-	-	-	-	-	-	-
Hantaan	-	-	-	-	-	-	-	-	-
K virus	-	-	-	-	-	-	-	-	-
LCMV	-	-	-	-	-	-	-	-	-
LDEV	-	-	-	-	-	-	-	-	-
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-
MAV1	-	-	-	-	-	-	-	-	-
MAV2	-	-	-	-	-	-	-	-	-
MCMV	-	-	-	-	-	-	-	-	-
MHV	-	-	-	-	-	-	-	-	-
MNV	-	-	-	-	-	-	-	-	-
MPV	-	-	-	-	-	-	-	-	-
MVM	-	-	-	-	-	-	-	-	-
<i>Pneumocystis murina</i>	-	-	-	-	-	-	-	-	-
Polyoma	-	-	-	-	-	-	-	-	-
PVM	-	-	-	-	-	-	-	-	-
REO3	-	-	-	-	-	-	-	-	-
TMEV	-	-	-	-	-	-	-	-	-
Sendai	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>	-	-	-	-	-	-	-	-	-
Mouse IgG	N	N	N	N	N	N	N	N	N

	114-A	114-B
MTV	-	-
CAR bacillus	-	-
<i>Encephalitozoon cuniculi</i>	-	-
Ectromelia	-	-
EDIM	-	-
Hantaan	-	-
K virus	-	-

	114-A	114-B
LCMV	-	-
LDEV	-	-
<i>Mycoplasma pulmonis</i>	-	-
MAV1	-	-
MAV2	-	-
MCMV	-	-
MHV	-	-
MNV	-	-
MPV	-	-
MVM	-	-
<i>Pneumocystis murina</i>	-	-
Polyoma	-	-
PVM	-	-
REO3	-	-
TMEV	-	-
Sendai	-	-
<i>Clostridium piliforme</i>	-	-
Mouse IgG	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	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
<i>Cryptosporidium</i> spp.	-	-	-	-	-	-	-	-	-
<i>Helicobacter</i> spp.	-	-	-	-	-	-	-	-	-
<i>Helicobacter bilis</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter ganmani</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter hepaticus</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter mastomyrinus</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter rodentium</i>	-	-	-	-	-	-	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-	-	-	-	-	-	-

feces	114-A	114-B
<i>Cryptosporidium</i> spp.	-	-
<i>Helicobacter</i> spp.	-	-
<i>Helicobacter bilis</i>	-	-
<i>Helicobacter ganmani</i>	-	-
<i>Helicobacter hepaticus</i>	-	-
<i>Helicobacter mastomyrinus</i>	-	-

feces	114-A	114-B
<i>Helicobacter rodentium</i>	-	-
<i>Helicobacter typhlonius</i>	-	-

oral swab	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
<i>Mycoplasma pulmonis</i>	-	-	-	-	-	-	-	-	-
<i>Streptobacillus moniliformis</i>	-	-	-	-	-	-	-	-	-
<i>Streptococcus</i> sp. beta hemolytic Group A	-	-	-	-	-	-	-	-	-
<i>Streptococcus</i> sp. beta hemolytic Group B	-	-	-	-	-	-	-	-	-
<i>Streptococcus</i> sp. beta hemolytic Group C	-	-	-	-	-	-	-	-	-
<i>Streptococcus</i> sp. beta hemolytic Group G	-	-	-	-	-	-	-	-	-

oral swab	114-A	114-B
<i>Mycoplasma pulmonis</i>	-	-
<i>Streptobacillus moniliformis</i>	-	-
<i>Streptococcus</i> sp. beta hemolytic Group A	-	-
<i>Streptococcus</i> sp. beta hemolytic Group B	-	-
<i>Streptococcus</i> sp. beta hemolytic Group C	-	-
<i>Streptococcus</i> sp. beta hemolytic Group G	-	-

Legend: + = positive - = negative id:id = pooled sample range id+id+id = non-range pooled sample NT or blank = no test performed sus = suspect wps = weak positive XX = Testing in progress

PARASITOLOGY

	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
parasites	-	-	-	-	-	-	-	-	-

	114-A	114-B
parasites	-	-

MICROBIOLOGY

Specimen/Source: cecum

Isolate	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
<i>Citrobacter rodentium</i>	-	-	-	-	-	-	-	-	-
<i>Klebsiella oxytoca</i>	-	-	-	-	-	-	-	-	-
<i>Klebsiella pneumoniae</i>	-	-	-	-	-	-	-	-	-
<i>Salmonella enterica</i>	-	-	-	-	-	-	-	-	-

Specimen/Source: cecum

Isolate	114-A	114-B
<i>Citrobacter rodentium</i>	-	-
<i>Klebsiella oxytoca</i>	-	-
<i>Klebsiella pneumoniae</i>	-	-
<i>Salmonella enterica</i>	-	-

Specimen/Source: oral swab

Isolate	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
<i>Bordetella bronchiseptica</i>	-	-	-	-	-	-	-	-	-
<i>Bordetella hinzii</i>	-	-	-	-	-	-	-	-	-
<i>Corynebacterium kutscheri</i>	-	-	-	-	-	-	-	-	-
<i>Pasteurella multocida</i>	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i> biotype Heyl	-	-	-	-	-	-	-	-	-
<i>Pasteurella pneumotropica</i> biotype Jawetz	-	-	-	-	-	-	-	-	-
<i>Streptococcus pneumoniae</i>	-	-	-	-	-	-	-	-	-

Specimen/Source: oral swab

Isolate	114-A	114-B
<i>Bordetella bronchiseptica</i>	-	-
<i>Bordetella hinzii</i>	-	-
<i>Corynebacterium kutscheri</i>	-	-
<i>Pasteurella multocida</i>	-	-
<i>Pasteurella pneumotropica</i> biotype Heyl	-	-
<i>Pasteurella pneumotropica</i> biotype Jawetz	-	-
<i>Streptococcus pneumoniae</i>	-	-

Specimen/Source: skin swab

Isolate	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
<i>Corynebacterium bovis</i>	-	-	-	-	-	-	-	-	-

Specimen/Source: skin swab

Isolate	114-A	114-B
<i>Corynebacterium bovis</i>	-	-

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

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IDEXX BioAnalytics Case # 37351-2021

Received Date: 12/16/2021

Completed: 12/21/2021

SEROLOGY DETAILS

	Baseline	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
MTV										
MTV	MFI > 3.000	-	-	-	-	-	-	-	-	-
CAR bacillus										
CAR bacillus purified bacteria	MFI > 3.750	-	-	-	-	-	-	-	-	-
Encephalitozoon cuniculi										
<i>E. cuniculi</i> purified antigen	MFI > 1.200	-	-	-	-	-	-	-	-	-
Ectromelia										
Ectromelia purified virus	MFI > 2.000	-	-	-	-	-	-	-	-	-
EDIM										
EDIM purified virus	MFI > 4.000	-	-	-	-	-	-	-	-	-
EDIM VP6 recombinant	MFI > 2.500	-	-	-	-	-	-	-	-	-
Hantaan										
Hantaan NP	MFI > 4.000	-	-	-	-	-	-	-	-	-
K virus										
K purified virus	MFI > 4.500	-	-	-	-	-	-	-	-	-
LCMV										
LCMV recombinant	MFI > 3.000	-	-	-	-	-	-	-	-	-
LDEV										
LDEV	MFI > 4.500	-	-	-	-	-	-	-	-	-
Mycoplasma pulmonis										
<i>M. pulmonis</i> purified bacteria	MFI > 4.250	-	-	-	-	-	-	-	-	-
MAV1										
MAV1 purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-
MAV2										
MAV2 purified virus	MFI > 4.500	-	-	-	-	-	-	-	-	-
MCMV										

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

	Baseline	116-A	116-B	116-C	116-D	113-A	113-B	113-C	113-D	113-E
MCMV purified virus	MFI > 3.500	-	-	-	-	-	-	-	-	-
MHV										
MHV purified virus	MFI > 2.500	-	-	-	-	-	-	-	-	-
MHV NC recombinant	MFI > 2.500	-	-	-	-	-	-	-	-	-
MNV										
MNV purified virus	MFI > 3.000	-	-	-	-	-	-	-	-	-
MNV VP1 recombinant	MFI > 4.000	-	-	-	-	-	-	-	-	-
MPV										
MPV VP2 recombinant	MFI > 2.000	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-
MVM										
MVM VP2 recombinant	MFI > 2.000	-	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-
<i>Pneumocystis murina</i>										
<i>P. murina</i>	MFI > 0.750	-	-	-	-	-	-	-	-	-
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	-	-	-	-	-	-	-	-	-

	Baseline	114-A	114-B
MTV			
MTV	MFI > 3.000	-	-
CAR bacillus			
CAR bacillus purified bacteria	MFI > 3.750	-	-
<i>Encephalitozoon cuniculi</i>			
<i>E. cuniculi</i> purified antigen	MFI > 1.200	-	-
Ectromelia			
Ectromelia purified virus	MFI > 2.000	-	-

	Baseline	114-A	114-B
EDIM			
EDIM purified virus	MFI > 4.000	-	-
EDIM VP6 recombinant	MFI > 2.500	-	-
Hantaan			
Hantaan NP	MFI > 4.000	-	-
K virus			
K purified virus	MFI > 4.500	-	-
LCMV			
LCMV recombinant	MFI > 3.000	-	-
LDEV			
LDEV	MFI > 4.500	-	-
<i>Mycoplasma pulmonis</i>			
<i>M. pulmonis</i> purified bacteria	MFI > 4.250	-	-
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 > 3.000	-	-
MNV VP1 recombinant	MFI > 4.000	-	-
MPV			
MPV VP2 recombinant	MFI > 2.000	-	-
NS1 ¹	MFI > 3.750	-	-
MVM			
MVM VP2 recombinant	MFI > 2.000	-	-
NS1 ¹	MFI > 3.750	-	-
<i>Pneumocystis murina</i>			
<i>P. murina</i>	MFI > 0.750	-	-
Polyoma			
Polyoma purified virus	MFI > 3.750	-	-
PVM			
PVM purified virus	MFI > 2.500	-	-
REO3			
REO3 purified virus	MFI > 4.900	-	-
TMEV			

	Baseline	114-A	114-B
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.