

FINAL REPORT OF LABORATORY EXAMINATION

4011 Discovery Drive, Columbia, MO 65201

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IDEXX BioAnalytics Case # 135847-2022

Received Date: 12/21/2022

Completed: 12/29/2022

Submitted By

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Referred By

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Specimen Description

Species: mouse

Description: Feces; Pelt Swab

Number of Specimens/Animals: 5

Building/Facility: Discovery Ridge

Client ID	Investigator	Room #	Species	Sex
W113 Mouse Pin Worm Fecal and Fur Mite Swab	Amos-Landgraf	W113	mouse	M/F
W114 Mouse Pin Worm Fecal and Fur Mite Swab	Amos-Landgraf	W114	mouse	M/F
W116 Mouse Pin Worm Fecal and Fur Mite Swab 1	Amos-Landgraf	W116	mouse	M/F
W116 Mouse Pin Worm Fecal and Fur Mite Swab 2	Amos-Landgraf	W116	mouse	M/F
W116 Mouse Pin Worm Fecal and Fur Mite Swab 3	Amos-Landgraf	W116	mouse	M/F

Services/Tests Performed: Pinworm and Fur Mite Panel (1-5)

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

General Comments: Quarterly pin worm fecal sample and fur mite swab for rooms W113, W114, and W116 of the MMRRC n=5; pooled fecal samples and pooled fur mite swabs, KAV

Summary: All test results were negative.

PCR EVALUATION

feces	W113 Mouse Pin Worm Fecal and Fur Mite Swab
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

feces	W114 Mouse Pin Worm Fecal and Fur Mite Swab
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

feces	W116 Mouse Pin Worm Fecal and Fur Mite Swab 1
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

feces	W116 Mouse Pin Worm Fecal and Fur Mite Swab 2
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

feces	W116 Mouse Pin Worm Fecal and Fur Mite Swab 3
<i>Aspiculuris tetraptera</i>	-
<i>Syphacia muris</i>	-
<i>Syphacia obvelata</i>	-

pelt swab	W113 Mouse Pin Worm Fecal and Fur Mite Swab
<i>Myocoptes</i>	-
<i>Radfordia/Myobia</i>	-

pelt swab	W114 Mouse Pin Worm Fecal and Fur Mite Swab
<i>Myocoptes</i>	-
<i>Radfordia/Myobia</i>	-

pelt swab	W116 Mouse Pin Worm Fecal and Fur Mite Swab 1
<i>Myocoptes</i>	-

pelt swab	W116 Mouse Pin Worm Fecal and Fur Mite Swab 1
<i>Radfordia/Myobia</i>	-

pelt swab	W116 Mouse Pin Worm Fecal and Fur Mite Swab 2
<i>Myocoptes</i>	-
<i>Radfordia/Myobia</i>	-

pelt swab	W116 Mouse Pin Worm Fecal and Fur Mite Swab 3
<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 # 134108-2022

Received Date: 12/14/2022

Completed: 12/20/2022

Submitted By

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Specimen Description

Species: mouse
Breed/Strain: CR ATH HE
Description: Whole Animal
Number of Specimens/Animals: 12
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	9/12/2022
116-B	Franklin	W116	mouse	CR ATH HE	F	2	9/12/2022
116-C	Franklin	W116	mouse	CR ATH HE	F	3	9/12/2022
116-D	Franklin/Bryda	W116	mouse	CR ATH HE	F	4	9/12/2022
116-E	Franklin	W116	mouse	CR ATH HE	F	5	9/12/2022
113-A	Bryda	W113	mouse	CR ATH HE	F	2	9/12/2022
113-B	Bryda	W113	mouse	CR ATH HE	F	3	9/12/2022
113-C	Bryda	W113	mouse	CR ATH HE	F	4	9/12/2022
113-D	Bryda	W113	mouse	CR ATH HE	F	5	9/12/2022
113-E	Bryda	W113	mouse	CR ATH HE	F	6	9/12/2022
114-A	Bryda	W114	mouse	CR ATH HE	F	4	9/12/2022
114-B	Bryda	W114	mouse	CR ATH HE	F	5	9/12/2022

Services/Tests Performed: MU MMRRC Mouse Annual Sentinel Profile (1-12)

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 - 2022 Q4 'A' room mouse sentinel necropsies

Summary: Equivocal reactivity to MPV was detected by MFI in sample 116-A; however, the conserved parvovirus NS1 protein MFI and MPV IFA test results were negative. The overall conclusion is that the sample is negative for antibodies to MPV.

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

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

	113-E	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	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	116-E	113-A	113-B	113-C	113-D
<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	113-E	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	113-E	114-A	114-B
<i>Helicobacter rodentium</i>	-	-	-
<i>Helicobacter typhlonius</i>	-	-	-

oral swab	116-A	116-B	116-C	116-D	116-E	113-A	113-B	113-C	113-D
<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	113-E	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	116-E	113-A	113-B	113-C	113-D
parasites	-	-	-	-	-	-	-	-	-

	113-E	114-A	114-B
parasites	-	-	-

MICROBIOLOGY

Specimen/Source: cecum

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

Specimen/Source: cecum

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

Specimen/Source: skin swab

Isolate	113-E	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 # 134108-2022

Received Date: 12/14/2022

Completed: 12/20/2022

SEROLOGY DETAILS

	Baseline	116-A	116-B	116-C	116-D	116-E	113-A	113-B	113-C	113-D
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	116-E	113-A	113-B	113-C	113-D
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	EQ	-	-	-	-	-	-	-	-
NS1 ¹	MFI > 3.750	-	-	-	-	-	-	-	-	-
MPV virus	IFA	-								
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	-	-	-	-	-	-	-	-	-
wt TMEV purified virus	MFI > 3.500	-	-	-	-	-	-	-	-	-
Sendai										
Sendai purified virus	MFI > 3.750	-	-	-	-	-	-	-	-	-
<i>Clostridium piliforme</i>										
<i>Clostridium piliforme</i> purified bacteria	MFI > 4.950	-	-	-	-	-	-	-	-	-

	Baseline	113-E	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				

	Baseline	113-E	114-A	114-B
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				
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	-	-	-
MPV virus	IFA			
MVM				
MVM VP2 recombinant	MFI > 2.000	-	-	-
NS1 ¹	MFI > 3.750	-	-	-
Pneumocystis murina				
<i>P. murina</i>	MFI > 0.750	-	-	-
Polyoma				
Polyoma purified virus	MFI > 3.750	-	-	-
PVM				
PVM purified virus	MFI > 2.500	-	-	-
REO3				

	Baseline	113-E	114-A	114-B
REO3 purified virus	MFI > 4.900	-	-	-
TMEV				
TMEV purified virus	MFI > 2.250	-	-	-
wt TMEV purified virus	MFI > 3.500	-	-	-
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.