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Submitter: Uni. of QLD - Translational Research Institute

37 Kent Street

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Contact: Rona Barugahare

Submission No: 22/A713

Your ref: EAD MNV and facility screening

Date received: 16 August 2022

Date of issue: 13 September 2022

Location: 1002 / Strain ID: 12.7.22 to 9.8.22 **Species: Mouse**

Bacteria and Fungi	Pos / Tested	Laboratory	Method	Sample Type
Corynebacterium bovis	0 / 1	Cerberus	PCR	Exhaust Air Dust
Corynebacterium mastitidis	0 / 1	Cerberus	PCR	Exhaust Air Dust
Helicobacter spp	0 / 1	Cerberus	PCR	Exhaust Air Dust
Klebsiella oxytoca	0 / 1	Cerberus	PCR	Exhaust Air Dust
Klebsiella pneumoniae	0 / 1	Cerberus	PCR	Exhaust Air Dust
Mycoplasma pulmonis	0 / 1	Cerberus	PCR	Exhaust Air Dust
Pasteurella pneumotropica	0 / 1	Cerberus	PCR	Exhaust Air Dust
Proteus mirabilis	0 / 1	Cerberus	PCR	Exhaust Air Dust
Salmonella spp	0 / 1	Cerberus	PCR	Exhaust Air Dust
Staphylococcus aureus	0 / 1	Cerberus	PCR	Exhaust Air Dust
Staphylococcus spp	1 / 1	Cerberus	PCR	Exhaust Air Dust
Staphylococcus xylosus	1 / 1	Cerberus	PCR	Exhaust Air Dust
Streptococcus pneumoniae (alpha haem)	0 / 1	Cerberus	PCR	Exhaust Air Dust
Streptococcus spp	1 / 1	Cerberus	PCR	Exhaust Air Dust
Ectoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Fur mites - Myobia musculi	0 / 1	Cerberus	PCR	Exhaust Air Dust
Fur mites - Myocoptes musculinus	0 / 1	Cerberus	PCR	Exhaust Air Dust
Fur mites - Radfordia affinis	0 / 1	Cerberus	PCR	Exhaust Air Dust
Endoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Cryptosporidium spp	0 / 1	Cerberus	PCR	Exhaust Air Dust
Encephalitozoon cuniculi	0 / 1	Cerberus	PCR	Exhaust Air Dust
Giardia muris	0 / 1	Cerberus	PCR	Exhaust Air Dust
Pinworm - Aspiculuris tetraptera	0 / 1	Cerberus	PCR	Exhaust Air Dust
Pinworm - Syphacia obvelata	0 / 1	Cerberus	PCR	Exhaust Air Dust
Spironucleus muris	0 / 1	Cerberus	PCR	Exhaust Air Dust
Non-Pathogenic Protozoa	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Chilomastix spp	0 / 1	Cerberus	PCR	Exhaust Air Dust
Entamoeba muris	0 / 1	Cerberus	PCR	Exhaust Air Dust
Tritrichomonas muris	0 / 1	Cerberus	PCR	Exhaust Air Dust
Virus	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Adenovirus Type 1	0 / 1	Cerberus	PCR	Exhaust Air Dust
Adenovirus Type 2	0 / 1	Cerberus	PCR	Exhaust Air Dust
Lymphocytic Choriomeningitis Virus	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust
Minute Virus of Mice	0 / 1	Cerberus	PCR	Exhaust Air Dust
Mouse Hepatitis Virus	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Kidney Parvovirus	0 / 1	Cerberus	PCR	Exhaust Air Dust
Mouse Norovirus	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Parvovirus	0 / 1	Cerberus	PCR	Exhaust Air Dust
Mouse Thymic Virus	0 / 1	Cerberus	PCR	Exhaust Air Dust
Murine Cytomegalovirus	0 / 1	Cerberus	PCR	Exhaust Air Dust

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Pneumonia Virus of Mice	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust
Polyoma Virus	0 / 1	Cerberus	PCR	Exhaust Air Dust
Reovirus Type 3	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust
Rotavirus	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust
Sendai Virus	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust
Theiler`s Encephalomyelitis virus	0 / 1	Cerberus	Rt PCR	Exhaust Air Dust

Location: 1002 / Strain ID: 23.6.22 to 9.8.22 **Species: Mouse**

Bacteria and Fungi	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Corynebacterium bovis	0 / 5	Cerberus	PCR	Exhaust Air Dust
Corynebacterium mastitidis	0 / 5	Cerberus	PCR	Exhaust Air Dust
Helicobacter spp	0 / 5	Cerberus	PCR	Exhaust Air Dust
Klebsiella oxytoca	0 / 5	Cerberus	PCR	Exhaust Air Dust
Klebsiella pneumoniae	0 / 5	Cerberus	PCR	Exhaust Air Dust
Mycoplasma pulmonis	0 / 5	Cerberus	PCR	Exhaust Air Dust
Pasteurella pneumotropica	0 / 5	Cerberus	PCR	Exhaust Air Dust
Proteus mirabilis	0 / 5	Cerberus	PCR	Exhaust Air Dust
Salmonella spp	0 / 5	Cerberus	PCR	Exhaust Air Dust
Staphylococcus aureus	0 / 5	Cerberus	PCR	Exhaust Air Dust
Staphylococcus spp	5 / 5	Cerberus	PCR	Exhaust Air Dust
Staphylococcus xylosus	5 / 5	Cerberus	PCR	Exhaust Air Dust
Streptococcus pneumoniae (alpha haem)	0 / 5	Cerberus	PCR	Exhaust Air Dust
Streptococcus spp	0 / 5	Cerberus	PCR	Exhaust Air Dust
Ectoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Fur mites - Myobia musculi	0 / 5	Cerberus	PCR	Exhaust Air Dust
Fur mites - Myocoptes musculinus	0 / 5	Cerberus	PCR	Exhaust Air Dust
Fur mites - Radfordia affinis	0 / 5	Cerberus	PCR	Exhaust Air Dust
Endoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Cryptosporidium spp	0 / 5	Cerberus	PCR	Exhaust Air Dust
Encephalitozoon cuniculi	0 / 5	Cerberus	PCR	Exhaust Air Dust
Giardia muris	0 / 5	Cerberus	PCR	Exhaust Air Dust
Pinworm - Aspiculuris tetraptera	0 / 5	Cerberus	PCR	Exhaust Air Dust
Pinworm - Syphacia obvelata	0 / 5	Cerberus	PCR	Exhaust Air Dust
Spironucleus muris	0 / 5	Cerberus	PCR	Exhaust Air Dust
Non-Pathogenic Protozoa	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Chilomastix spp	0 / 5	Cerberus	PCR	Exhaust Air Dust
Entamoeba muris	0 / 5	Cerberus	PCR	Exhaust Air Dust
Tritrichomonas muris	0 / 5	Cerberus	PCR	Exhaust Air Dust
Virus	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Adenovirus Type 1	0 / 5	Cerberus	PCR	Exhaust Air Dust
Adenovirus Type 2	0 / 5	Cerberus	PCR	Exhaust Air Dust
Lymphocytic Choriomeningitis Virus	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust
Minute Virus of Mice	0 / 5	Cerberus	PCR	Exhaust Air Dust
Mouse Hepatitis Virus	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Kidney Parvovirus	0 / 5	Cerberus	PCR	Exhaust Air Dust
Mouse Norovirus	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Parvovirus	0 / 5	Cerberus	PCR	Exhaust Air Dust
Mouse Thymic Virus	0 / 5	Cerberus	PCR	Exhaust Air Dust
Murine Cytomegalovirus	0 / 5	Cerberus	PCR	Exhaust Air Dust

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Pneumonia Virus of Mice	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust
Polyoma Virus	0 / 5	Cerberus	PCR	Exhaust Air Dust
Reovirus Type 3	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust
Rotavirus	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust
Sendai Virus	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust
Theiler`s Encephalomyelitis virus	0 / 5	Cerberus	Rt PCR	Exhaust Air Dust

Location: 1003 / Strain ID: 23.6.22 to 9.8.22 **Species: Mouse**

Bacteria and Fungi	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Corynebacterium bovis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Corynebacterium mastitidis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Helicobacter spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella oxytoca	0 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella pneumoniae	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mycoplasma pulmonis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pasteurella pneumotropica	4 / 6	Cerberus	PCR	Exhaust Air Dust
Proteus mirabilis	1 / 6	Cerberus	PCR	Exhaust Air Dust
Salmonella spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus aureus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus spp	6 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus xylosus	6 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus pneumoniae (alpha haem)	0 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus spp	5 / 6	Cerberus	PCR	Exhaust Air Dust
Ectoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Fur mites - Myobia musculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Myocoptes musculinus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Radfordia affinis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Endoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Cryptosporidium spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Encephalitozoon cuniculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Giardia muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Aspiculuris tetraptera	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Syphacia obvelata	0 / 6	Cerberus	PCR	Exhaust Air Dust
Spironucleus muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Non-Pathogenic Protozoa	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Chilomastix spp	1 / 6	Cerberus	PCR	Exhaust Air Dust
Entamoeba muris	1 / 6	Cerberus	PCR	Exhaust Air Dust
Tritrichomonas muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Virus	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Adenovirus Type 1	0 / 6	Cerberus	PCR	Exhaust Air Dust
Adenovirus Type 2	0 / 6	Cerberus	PCR	Exhaust Air Dust
Lymphocytic Choriomeningitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Minute Virus of Mice	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Hepatitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Kidney Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Norovirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Thymic Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Murine Cytomegalovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust

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Pneumonia Virus of Mice	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Polyoma Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Reovirus Type 3	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Rotavirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Sendai Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Theiler`s Encephalomyelitis virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust

Location: 1004 / Strain ID: 23.6.22 to 9.8.22 **Species: Mouse**

Bacteria and Fungi	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Corynebacterium bovis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Corynebacterium mastitidis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Helicobacter spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella oxytoca	2 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella pneumoniae	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mycoplasma pulmonis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pasteurella pneumotropica	2 / 6	Cerberus	PCR	Exhaust Air Dust
Proteus mirabilis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Salmonella spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus aureus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus spp	6 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus xylosus	6 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus pneumoniae (alpha haem)	0 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus spp	2 / 6	Cerberus	PCR	Exhaust Air Dust
Ectoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Fur mites - Myobia musculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Myocoptes musculinus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Radfordia affinis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Endoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Cryptosporidium spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Encephalitozoon cuniculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Giardia muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Aspiculuris tetraptera	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Syphacia obvelata	0 / 6	Cerberus	PCR	Exhaust Air Dust
Spironucleus muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Non-Pathogenic Protozoa	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Chilomastix spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Entamoeba muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Tritrichomonas muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Virus	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Adenovirus Type 1	0 / 6	Cerberus	PCR	Exhaust Air Dust
Adenovirus Type 2	0 / 6	Cerberus	PCR	Exhaust Air Dust
Lymphocytic Choriomeningitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Minute Virus of Mice	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Hepatitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Kidney Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Norovirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Thymic Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Murine Cytomegalovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust

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Pneumonia Virus of Mice	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Polyoma Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Reovirus Type 3	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Rotavirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Sendai Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Theiler`s Encephalomyelitis virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust

Location: 1005 / Strain ID: 23.6.22 to 9.8.22 **Species: Mouse**

Bacteria and Fungi	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Corynebacterium bovis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Corynebacterium mastitidis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Helicobacter spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella oxytoca	0 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella pneumoniae	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mycoplasma pulmonis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pasteurella pneumotropica	3 / 6	Cerberus	PCR	Exhaust Air Dust
Proteus mirabilis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Salmonella spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus aureus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus spp	6 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus xylosus	6 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus pneumoniae (alpha haem)	0 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus spp	1 / 6	Cerberus	PCR	Exhaust Air Dust
Ectoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Fur mites - Myobia musculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Myocoptes musculinus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Radfordia affinis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Endoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Cryptosporidium spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Encephalitozoon cuniculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Giardia muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Aspiculuris tetraptera	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Syphacia obvelata	0 / 6	Cerberus	PCR	Exhaust Air Dust
Spironucleus muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Non-Pathogenic Protozoa	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Chilomastix spp	1 / 6	Cerberus	PCR	Exhaust Air Dust
Entamoeba muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Tritrichomonas muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Virus	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Adenovirus Type 1	0 / 6	Cerberus	PCR	Exhaust Air Dust
Adenovirus Type 2	0 / 6	Cerberus	PCR	Exhaust Air Dust
Lymphocytic Choriomeningitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Minute Virus of Mice	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Hepatitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Kidney Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Norovirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Thymic Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Murine Cytomegalovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust

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Pneumonia Virus of Mice	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Polyoma Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Reovirus Type 3	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Rotavirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Sendai Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Theiler`s Encephalomyelitis virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust

Location: 1077 / Strain ID: 23.6.22 to 9.8.22 **Species: Mouse**

Bacteria and Fungi	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Corynebacterium bovis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Corynebacterium mastitidis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Helicobacter spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella oxytoca	0 / 6	Cerberus	PCR	Exhaust Air Dust
Klebsiella pneumoniae	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mycoplasma pulmonis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pasteurella pneumotropica	1 / 6	Cerberus	PCR	Exhaust Air Dust
Proteus mirabilis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Salmonella spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus aureus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus spp	6 / 6	Cerberus	PCR	Exhaust Air Dust
Staphylococcus xylosus	6 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus pneumoniae (alpha haem)	0 / 6	Cerberus	PCR	Exhaust Air Dust
Streptococcus spp	5 / 6	Cerberus	PCR	Exhaust Air Dust
Ectoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Fur mites - Myobia musculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Myocoptes musculinus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Fur mites - Radfordia affinis	0 / 6	Cerberus	PCR	Exhaust Air Dust
Endoparasite	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Cryptosporidium spp	0 / 6	Cerberus	PCR	Exhaust Air Dust
Encephalitozoon cuniculi	0 / 6	Cerberus	PCR	Exhaust Air Dust
Giardia muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Aspiculuris tetraptera	0 / 6	Cerberus	PCR	Exhaust Air Dust
Pinworm - Syphacia obvelata	0 / 6	Cerberus	PCR	Exhaust Air Dust
Spironucleus muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Non-Pathogenic Protozoa	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Chilomastix spp	1 / 6	Cerberus	PCR	Exhaust Air Dust
Entamoeba muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Tritrichomonas muris	0 / 6	Cerberus	PCR	Exhaust Air Dust
Virus	**Pos / Tested**	**Laboratory**	**Method**	**Sample Type**
Adenovirus Type 1	0 / 6	Cerberus	PCR	Exhaust Air Dust
Adenovirus Type 2	0 / 6	Cerberus	PCR	Exhaust Air Dust
Lymphocytic Choriomeningitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Minute Virus of Mice	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Hepatitis Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Kidney Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Norovirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Mouse Parvovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Mouse Thymic Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Murine Cytomegalovirus	0 / 6	Cerberus	PCR	Exhaust Air Dust

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Pneumonia Virus of Mice	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Polyoma Virus	0 / 6	Cerberus	PCR	Exhaust Air Dust
Reovirus Type 3	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Rotavirus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Sendai Virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust
Theiler`s Encephalomyelitis virus	0 / 6	Cerberus	Rt PCR	Exhaust Air Dust

Comment:

Samples Refs. were:

Sample AHU 10, Sample AHU 11, Sample AHU 12, Sample AHU 13, Sample AHU 14, Sample AHU 17, Sample AHU 18, Sample AHU 19, Sample AHU 21, Sample AHU 22, Sample AHU 23, Sample AHU 24, Sample AHU 25, Sample AHU 26, Sample AHU 27, Sample AHU 28 - import, Sample AHU 29, Sample AHU 30, Sample AHU 31, Sample AHU 32, Sample AHU 33, Sample AHU 34, Sample AHU 35, Sample AHU 37, Sample AHU 38, Sample AHU 39, Sample AHU 41, Sample AHU 42, Sample AHU 46, Sample AHU 50.

PCR/RT-PCR assays include extraction, positive and negative controls to verify the results.

The following samples were POSITIVE for Klebsiella oxytoca by PCR: Sample AHU 32 (1004), Sample AHU 42 (1004).

Klebsiella oxytoca is ubiquitous in the environment and can be cultured from skin, mucus membranes, oropharynx and intestines of healthy animals and humans. It is transmitted by aerosol and contact.

Klebsiella oxytoca is an opportunistic pathogen associated with suppurative otitis media, urogenital tract infections (UTI), and pneumonia particularly in immunodeficient, diabetic or antibiotic treated animals.

The following samples were POSITIVE for Pasteurella pneumotropica by PCR: Sample AHU 24 (1003), Sample AHU 25 (1003), Sample AHU 26 (1003), Sample AHU 27 (1003), Sample AHU 42 (1004), Sample AHU 33 (1004), Sample AHU 46 (1005), Sample AHU 37 (1005), Sample AHU 39 (1005), Sample AHU 11 (1077).

Pasteurella pneumotropica is a frequently occurring opportunistic pathogen in rodent colonies. It has the potential to cause pathology especially in immune-compromised or stressed individuals.

The following samples were POSITIVE for Proteus mirabilis by PCR: Sample AHU 24 (1003).

Proteus sp. are Gram negative bacteria which are ubiquitous in the environment and, Proteus mirabilis (the one we most commonly culture from rodents), can be cultured from the upper respiratory tract and faeces of normal rodents. It may cause suppurative disease (urinary tract) in immunocompromised animals.

The following samples were POSITIVE for Staphylococcus spp by PCR: Sample AHU 19 (1002), Sample AHU 23 (1002), Sample AHU 21 (1002), Sample AHU 18 (1002), Sample AHU 17 (1002), Sample AHU 28 - import (1002), Sample AHU 22 (1003), Sample AHU 41 (1003), Sample AHU 24 (1003), Sample AHU 25 (1003), Sample AHU 26 (1003), Sample AHU 27 (1003), Sample AHU 31 (1004), Sample AHU 29 (1004), Sample AHU 30 (1004), Sample AHU 32 (1004), Sample AHU 42 (1004), Sample AHU 33 (1004), Sample AHU 34 (1005), Sample AHU 35 (1005), Sample AHU 46 (1005), Sample AHU 37 (1005), Sample AHU 38 (1005), Sample AHU 39 (1005), Sample AHU 12 (1077), Sample AHU 50 (1077), Sample AHU 13 (1077), Sample AHU 14 (1077), Sample AHU 11 (1077), Sample AHU 10 (1077).

The following samples were POSITIVE for Staphylococcus xylosus by PCR: Sample AHU 19 (1002), Sample AHU 23 (1002), Sample AHU 21 (1002), Sample AHU 18 (1002), Sample AHU 17 (1002), Sample AHU 28 - import (1002), Sample AHU 22 (1003), Sample AHU 41 (1003), Sample AHU 24 (1003), Sample AHU 25 (1003), Sample AHU 26 (1003), Sample AHU 27 (1003), Sample AHU 31 (1004), Sample AHU 29 (1004), Sample AHU 30 (1004), Sample AHU 32 (1004), Sample AHU 42 (1004), Sample AHU 33 (1004), Sample AHU 34 (1005), Sample AHU 35 (1005), Sample AHU 46 (1005), Sample AHU 37 (1005), Sample AHU 38 (1005), Sample AHU 39 (1005), Sample AHU 12 (1077), Sample AHU 50 (1077), Sample AHU 13 (1077), Sample AHU 14 (1077), Sample AHU 11 (1077), Sample AHU 10 (1077).

Staphylococcus xylosus may be a normal skin flora, however it has been associated with severe dermatitis in mice. Spontaneous Staphylococcus xylosus Infection in Mice Deficient in NADPH Oxidase and Comparison with Other Laboratory Mouse Strains. Gozalo AS et al. JAALAS 2010, 49:4; 480¬486.

The following samples were POSITIVE for Streptococcus spp by PCR: Sample AHU 28 - import (1002), Sample AHU 22 (1003), Sample AHU 41 (1003), Sample AHU 24 (1003), Sample AHU 25 (1003), Sample AHU 26 (1003), Sample AHU 29 (1004), Sample AHU 42 (1004), Sample AHU 38 (1005), Sample AHU 12 (1077), Sample AHU 50 (1077), Sample AHU 14 (1077), Sample AHU 11 (1077), Sample AHU 10 (1077).

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The following samples were POSITIVE for Chilomastix spp by PCR: Sample AHU 22 (1003), Sample AHU 34 (1005), Sample AHU 14 (1077).

The following samples were POSITIVE for Entamoeba muris by PCR: Sample AHU 26 (1003).

Tritrichomonas muris, **Chilomastix bettencourti**, and **Entamoeba muris** are all considered non-pathogenic enteric protozoa and are frequently found in the intestinal contents of normal rodents.

However, there are scientific reports that Trichomonas muris is associated with altered immune responses in the gastrointestinal system, and therefore the presence of these protozoa may affect research outcomes for example colitis research. With this in mind, perhaps all 3 of the non-pathogenic species need to be tested for in order to advise research groups.

A positive result on the parasitology microscopy testing will depend on a range of variables such as the stage of life cycle and location within the intestine at the time of sampling. Therefore, a negative result does not rule out their presence in the gastrointestinal tract.

Exhaust Air Dust testing for specific infectious/parasitic organisms will give us a POSITIVE result if the organism's nucleic acid (DNA) is present in the dust. The level of copy numbers (strength of the positive result) does not relate to the viability/pathogenicity of the organism being tested. A POSITIVE result may or may not represent a clinical infection, it may indicate environmental contamination, or the presence of residual DNA left behind in the exhaust system from incomplete cleaning, following a previous infection/infestation.

Please interpret these results carefully, considering that it may not reflect viable organisms, and correlate the results to known clinical infections. Consider follow up testing of samples taken directly from potentially positive cages or animals.

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Peony Fung
Molecular Testing