

### Health Monitoring Report in Accordance with FELASA Recommendations

Location: **Medicine TAU**

Housing: **Conventional unit (CM)**

Samples collection: **13/06/2021**

Species: **Mouse sentinel**

Strain: **ICR**

Date of report: **20/06/2021**

Health report: **8 mice FELASA Quarterly**

	Test frequency	Latest results positive/tested	Testing laboratory TAU, CR	Test method	Historical results positive/tested	
		Jun 2021			Jun 2020	Jan 2021
<b>Viruses</b>						
Mouse hepatitis virus (MHV)	6 months	0/8	CR	IFA	0/8	0/8
Mouse rotavirus (EDIM-ROTA-A)	6 months	0/8	CR	MFIA	0/8	0/8
Minute virus of mice (MVM)	6 months	0/8	CR	MFIA	0/8	0/8
Mouse parvovirus (MPV-1,-2,-5)	6 months	0/8	CR	MFIA	0/8	0/8
Pneumonia virus of mice (PVM)	Annually	NT	CR	MFIA	NT	0/8
Sendai virus (SEND)	Annually	NT	CR	MFIA	NT	0/8
Theiler's murine encephalomyelitis virus (TMEV-GDVII)	6 months	0/8	CR	MFIA,IFA	0/8	0/8
Ectromelia virus (ECTRO)	Annually	NT	CR	MFIA	NT	0/8
Lymphocytic choriomeningitis virus (LCMV)	Annually	NT	CR	MFIA	NT	0/8
Mouse adenovirus type 1,2 (FL-MAV-1, K87-MAV-2)	Annually	NT	CR	MFIA	NT	0/8
Mouse cytomegalovirus (MCMV)	Annually	NT	CR	MFIA	NT	0/8
Reovirus type 3 (REO)	Annually	NT	CR	MFIA	NT	0/8
Generic parvovirus (NS-1)	6 months	0/8	CR	MFIA	0/8	0/8
Murine norovirus (MNV)	6 months	NT*	CR	MFIA	0/8	NT
<b>Bacteria, mycoplasma and fungi</b>						
		Jun 2021			Jun 2020	Jan 2021
Mycoplasma pulmonis (MPUL)-Mouse	Annually	NT	CR	MFIA	NT	0/8
Bordetella bronchiseptica (Nasopharynx, lung)	6 months	0/8	TAU	CULT	0/8	0/8
Citrobacter rodentium (Intestine, feces)	6 months	0/8	TAU	CULT	0/8	0/8
Clostridium piliforme (CPIL, Tyzzer's disease)	Annually	NT	CR	MFIA	0/8	0/8
Corynebacterium kitchneri (Nasopharynx, lung, intestine)	6 months	0/8	TAU	CULT	0/8	0/8
Klebsiella pneumoniae (Naso, lung)	6 months	0/8	TAU	CULT	0/8	0/8
Klebsiella oxytoca (Intestine, feces)	6 months	0/8	TAU	CULT	0/8	0/8
Pasteurellaceae, Pasteurella pneumotropica (Naso, lung)	6 months	0/8	TAU	CULT	1/8	0/8
Pseudomonas aeruginosa (Naso, lung)	6 months	0/8	TAU	CULT	0/8	0/8
Salmonella spp. (Intestine, feces)	6 months	0/8	TAU	CULT	0/8	0/8
Staphylococcus aureus (Skin, naso, lung)	6 months	0/8	TAU	CULT	1/8	1/8
Streptococci $\beta$ -haemolytic (not group D)	6 months	0/8	TAU	CULT	0/8	0/8
Streptococcus pneumoniae (Naso, lung)	6 months	0/8	TAU	CULT	0/8	0/8
Helicobacter spp.	6 months	NT**	TAU	PCR	0/8	0/8
Streptobacillus moniliformis (Naso)	6 months	0/8	TAU	CULT	0/8	0/8
Dermatophytes (Skin)	6 months	0/8	TAU	CULT	0/8	0/8
Corynebacterium bovis (Skin)	6 months	0/8	TAU	CULT	0/8	0/8
Pneumocystis carinii (Nude lung)	Annually	NT	CR	PCR	NT	NT

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<b>Parasites</b>						
Ectoparasites: Fur mites	6 months	0/8	TAU	MICR	0/8	0/8
Endoparasites: Pinworms	6 months	0/8	TAU	MICR	0/8	0/8
Opportunistic protozoa	6 months	0/8	TAU	MICR	0/8	0/8
Nonpathogenic protozoa: Chilomastix, Entamoeba, Trichomonas	6 months	Present	TAU	MICR	Present	Present
<b>Pathological lesions</b>	6 months	0/8	TAU	MACRO	1/8	0/8

Data are expressed as number positive/number tested

Abbreviations used in this report: ELISA=enzyme linked immunosorbent assay; MICR=microscopy; MACRO=macroscopic; IFA=immunofluorescence assay; MFIA=multiplex fluorescent immunoassay; CULT=culture; PATH=gross pathology; PCR=polymerase chain reaction; HIST=histopathology; NT=not tested; TAU=Tel Aviv University lab; CR=Charles River lab; IN=result interpreted as non-specific because not confirmed by alternative serologic assay or diagnostic methodology for other serologic assays

### Summary

**Serology:** Sentinel mice samples were negative for all tested viruses.

\*We consider serology mice test positive for Murine norovirus (MNV).

**Bacteriology:** Mice samples were negative for all pathogens according to Felasa panel. However, one mouse sample (4-CM, room 4) was positive for *Enterobacter cloacae*, pathogen not included in Felasa panel.

\*\*We consider mice samples positive for Helicobacter spp.

**Parasitology:** sentinel mice samples were negative for fur mites (ectoparasites) and pinworms (endoparasites).

**Pathology:** no gross signs.

**Notes:** *Viridans* group  $\alpha$ -*Streptococcus*, coagulase negative *Staphylococcus sp.*, *Enterococcus sp.*, *Lactobacillus spp.*, *Lactococcus sp.* and *Escherichia coli* are all common components of the microbiota. *Trichomonas*, *Chilomastix* and *Entamoeba* are all common intestinal protozoa.

Identification of *Pasteurellaceae*:

*Pasteurella pneumotropica* grows as gray colonies on blood agar whereas "Other *Pasteurellaceae*" refers to yellow lytic colonies. Both are gram-negative and API-20NE-positive (99%). Occasional confirmation by RT-PCR for the ITS region (IDEXX BioResearch) or 16S rRNA PCR and sequencing (Hy Laboratories and IDEXX BioResearch) indicates that the gray colonies are *Pasteurella pneumotropica* (99%, GeneBank accession number: M75083.1, NR\_042887.1) and the yellow colonies are *Pasteurella spp* (100%, GeneBank accession number: HF912264, JQ346058). Note that the JQ346058 sequence, which is called *P. pneumotropica* in GenBank, is not well characterized and is not associated with any publications. It is an outlier compared to all the other well-characterized *P. pneumotropica* isolates in the GenBank and is 100% identical to a *Pasteurella spp* (HF912264), which is better characterized (Dafni et al., 2019, J Am Assoc Lab Anim Sci.;58(2):201-207.

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