

Health Monitoring Report in Accordance with FELASA Recommendations

Location: **Life Sciences TAU**

Housing: **Britannia building**

Samples collection: **09/01/2022**

Species: **Mouse sentinel**

Strain: **ICR females**

Date of report: **16/01/2022**

Health report: **4 sentinel mice - FELASA Annual**

	Test method	Latest result	Historical results				
			Jan 2022	Jul 2021	Jan 2021	Jul 2020	Jan 2020
Viruses							
Mouse hepatitis virus (MHV)	IFA	1/4	0/2	0/2	0/2	0/3	1/3
Mouse rotavirus (EDIM-ROTA-A)	MFI	0/4	0/2	0/2	0/2	0/3	0/3
Minute virus of mice (MVM)	MFI	0/4	0/2	0/2	0/2	0/3	0/3
Mouse parvovirus (MPV-1,-2,-5)	MFI	0/4	0/2	0/2	0/2	0/3	0/3
Pneumonia virus of mice (PVM)	MFI	0/4	NT	0/2	0/2	NT	0/3
Sendai virus (SEND)	MFI	0/4	NT	0/2	0/2	NT	0/3
Theiler's murine encephalomyelitis virus (TMEV-GDVII)	MFI,IFA	0/4	0/2	0/2	0/2	0/3	0/3
Ectromelia virus (ECTRO)	MFI	0/4	NT	0/2	0/2	NT	0/3
Lymphocytic choriomeningitis virus (LCMV)	MFI	0/4	NT	0/2	0/2	NT	0/3
Mouse adenovirus type 1,2 (FL-MAV-1, K87-MAV-2)	MFI	0/4	NT	0/2	0/2	NT	0/3
Mouse cytomegalovirus (MCMV)	MFI	0/4	NT	0/2	0/2	NT	0/3
Reovirus type 3 (REO)	MFI	0/4	NT	0/2	0/2	NT	0/3
Generic parvovirus (NS-1)	MFI	0/4	0/2	0/2	0/2	0/3	0/3
Murine norovirus (MNV)	MFI	NT*	0/2	0/2	0/2	0/3	NT
Bacteria, mycoplasma and fungi							
Mycoplasma pulmonis (MPUL)-Mouse	MFI	0/4	NT	NT	NT	NT	0/3
Bordetella bronchiseptica (Nasopharynx, lung)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Citrobacter rodentium (Intestine, feces)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Clostridium piliforme (CPIL, Tyzzer's disease)	MFI	0/4	NT	NT	NT	NT	0/3
Corynebacterium kutcheri (Nasopharynx, lung, intestine)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Klebsiella pneumoniae (Naso, lung)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Klebsiella oxytoca (Intestine, feces)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Pasteurellaceae (Naso, lung)	CULT	1/4	0/2	0/2	0/2	0/3	0/3
Pasteurella pneumotropica							
Pseudomonas aeruginosa (Intestine, Feces)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Salmonella spp. (Intestine, feces)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Staphylococcus aureus (Skin, naso, lung)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Streptococci β-haemolytic (not group D)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Streptococcus pneumoniae (Naso, lung)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Helicobacter spp. (Intestine, feces)	PCR	NT**	NT	NT	NT	NT	NT
Streptobacillus moniliformis (Naso)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Dermatophytes (Skin)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Corynebacterium bovis (Skin)	CULT	0/4	0/2	0/2	0/2	0/3	0/3
Pneumocystis carinii (Nude lung)	PCR	NT	NT	NT	NT	NT	NT

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Parasites						
Ectoparasites: Fur mites	MICRO	0/4	0/2	0/2	0/3	0/3
Endoparasites: Pinworms	MICRO	1/4	0/2	0/2	0/3	2/3
Opportunistic protozoa	MICRO	0/4	0/2	0/2	0/3	0/3
Nonpathogenic protozoa: Chilomastix, Entamoeba, Trichomonas	MICRO	Present	Present	Present	Present	3/3
Pathological lesions	MACRO	0/4	0/2	0/2	0/3	0/3

Data are expressed as number positive/number tested

Abbreviations used in this report: ELISA=enzyme linked immunosorbent assay (CR); MICRO=microscopy (TAU); MACRO=macroscopic (TAU); IFA=immunofluorescence assay (CR); MFI=multiplex fluorescent immunoassay (TAU); CULT=culture (TAU); PATH=gross pathology (TAU); PCR=polymerase chain reaction (TAU,CR); 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 sample LS-7,10 pool (rooms 10 and 20) was positive for Mouse Hepatitis Virus (MHV) by serology tests.

*We consider mice samples positive for MNV (Murine norovirus).

Bacteriology: Mice samples were positive for *Pasteurellaceae* (LS-7: room 20; tray 7).

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

Parasitology: sentinel mice samples (LS-7,10 pool; room 10) were positive for pinworms (endoparasites) with adults and dozens of eggs observed under direct microscope. Other samples were negative for fur mites (ectoparasites) and pinworms (endoparasites).

Pathology: No gross signs.

Notes: *Viridans* group α -*Streptococcus*, coagulase negative *Staphylococcus* sp., *Enterococcus* sp., *Lactobacillus* sp., *Lactococcus* spp. 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, IDEXX BioResearch) indicates that gray colonies are *Pasteurella pneumotropica* (99%, GeneBank accession number: M75083.1, NR_042887.1) and yellow colonies are *Pasteurella* spp (100%, GeneBank accession number: HF912264, JQ346058). Note that the JQ346058 sequence, called *P. pneumotropica*, is poorly characterized. It shows 100% identical to a *Pasteurella* spp (HF912264) [Dafni et al., 2019, J Am Assoc Lab Anim Sci.;58(2):201-207].

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