

Health Monitoring Report in Accordance with FELASA Recommendations

Location: **Life Sciences TAU**

Housing: **Britannia building**

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

Species: **Rat sentinel**

Strain: **SD females**

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

Health report: **1 rat - FELASA Annual**

	Test method	Latest result	Historical results			
		Jan 2022	Jul 2021	Jan 2021	Jul 2020	Jan 2020
Viruses						
Hantaan (zoonotic hantaan virus-HANT)	MFI	0/1	NT	0/1	NT	0/1
Toolan's H1-rat parvovirus (H1)	MFI	0/1	0/1	0/1	0/1	0/1
Rodent adenovirus strain 1,2 (MAV1&MAV2)	MFI	0/1	NT	0/1	NT	0/1
Rat parvovirus (RPV)	MFI	0/1	0/1	0/1	0/1	0/1
Rat minute virus (RMV)	MFI	0/1	0/1	0/1	0/1	0/1
Kilham's rat virus-parvovirus (KRV)	MFI	0/1	0/1	0/1	0/1	0/1
Rodent pneumovirus (PVM)	MFI	0/1	0/1	0/1	0/1	0/1
Rat coronavirus (RCV/SDAV)	MFI	0/1	0/1	0/1	0/1	0/1
Rodent reovirus (REO)	MFI	0/1	NT	0/1	NT	0/1
Rat theilovirus (RTV)	MFI	1/1	0/1	0/1	1/1	1/1
Sendai virus (SEND)	MFI	0/1	NT	0/1	NT	0/1
Parvovirus (NS-1)	MFI	0/1	0/1	0/1	0/1	0/1
Pneumocystis carinii (PCAR, 'RRV')	IFA	0/1	0/1	0/1	NT	1/1
Murine norovirus (MNV)	IFA	NT*	NT	0/1	0/1	NT
Rat cytomegalovirus (RCMV)	IFA	0/1	NT	0/1	NT	0/1
Bacteria, mycoplasma and fungi						
		Jan 2022	Jul 2021	Jan 2021	Jul 2020	Jan 2020
Cilia-associated respiratory bacillus (CARB)	MFI	0/1	NT	0/1	NT	0/1
Mycoplasma pulmonis (MPUL)-Mouse	MFI	0/1	0/1	0/1	0/1	0/1
Bordetella bronchiseptica (Nasopharynx, lung)	CULT	0/1	0/1	0/1	0/1	0/1
Citrobacter rodentium (Intestine, feces)	CULT	0/1	0/1	0/1	0/1	0/1
Clostridium piliforme (CPIL, Tyzzer's disease)	MFI	0/1	0/1	0/1	0/1	0/1
Corynebacterium kutcheri (Nasopharynx, lung, intestine)	CULT	0/1	0/1	0/1	0/1	0/1
Klebsiella pneumoniae (Naso, lung)	CULT	0/1	0/1	0/1	0/1	0/1
Klebsiella oxytoca (Intestine, feces)	CULT	0/1	0/1	0/1	0/1	0/1
Pasteurellaceae (Naso, lung)	CULT	1/1	0/1	0/1	1/1	0/1
Pasteurella pneumotropica						
Pseudomonas aeruginosa (Intestine, Feces)	CULT	0/1	0/1	0/1	0/1	0/1
Salmonella spp. (Intestine, feces)	CULT	0/1	0/1	0/1	0/1	0/1
Staphylococcus aureus (Skin, naso, lung)	CULT	0/1	0/1	0/1	0/1	0/1
Streptococci β-haemolytic (not group D)	CULT	0/1	0/1	0/1	0/1	0/1
Streptococcus pneumoniae (Naso, lung)	CULT	0/1	0/1	0/1	0/1	0/1
Helicobacter spp. (Intestine, feces)	PCR	NT**	NT	NT	NT	NT
Streptobacillus moniliformis (Naso)	CULT	0/1	0/1	0/1	0/1	0/1
Dermatophytes (Skin)	CULT	0/1	0/1	0/1	0/1	0/1
Corynebacterium bovis (Skin)	CULT	0/1	0/1	0/1	0/1	0/1

	Test method	Latest result		Historical results		
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Parasites						
Ectoparasites: Fur mites	MICRO	0/1	0/1	0/1	0/1	0/1
Endoparasites: Pinworms	MICRO	0/1	0/1	0/1	0/1	1/1
Opportunistic protozoa	MICRO	0/1	0/1	0/1	0/1	0/1
Nonpathogenic protozoa: Chilomastix, Entamoeba, Trichomonas	MICRO	Present	Present	Present	Present	1/1
Pathological lesions	MACRO	0/1	0/1	0/1	0/1	0/1

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 rat was positive Rat theilovirus (RTV) tested by serology.

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

Bacteriology: Rat samples were positive for *Pasteurellaceae*.

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

Parasitology: sentinel rat 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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