

Health Monitoring Report in Accordance with FELASA Recommendations

Location: **Life Sciences TAU**

Housing: **Britannia building**

Samples collection: **12/07/2020**

Species: **Rat sentinel**

Strain: **SD females**

Date of report: **22/07/2020**

Health report: **1 rat FELASA Quarterly**

	Test frequency	Latest test date	Latest result	Testing laboratory TAU, CR	Test method	Historical results (6 months) positive/tested
Viruses						
Hantaan (zoonotic hantaan virus-HANT)	Annually		NT	CR	MFI	0/1
Toolan's H1-rat parvovirus (H1)	6 months	07/2020	0/1	CR	MFI	0/2
Rodent adenovirus strain 1 (MAV1)	Annually		NT	CR	MFI	0/1
Rodent adenovirus strain 2 (MAV2)	Annually		NT	CR	MFI	0/1
Rat parvovirus (RPV)	6 months	07/2020	0/1	CR	MFI	0/2
Rat minute virus (RMV)	6 months	07/2020	0/1	CR	MFI	0/2
Kilham's rat virus-parvovirus (KRV)	6 months	07/2020	0/1	CR	MFI	0/2
Rodent pneumovirus (PVM)	6 months	07/2020	0/1	CR	MFI	0/2
Rat coronavirus (RCV/SDAV)	6 months	07/2020	0/1	CR	MFI	0/2
Rodent reovirus (REO)	Annually		NT	CR	MFI	0/1
Rat theilovirus (RTV)	6 months	07/2020	1/1	CR	MFI	2/2
Sendai virus (SEND)	Annually		NT	CR	MFI	0/1
Parvovirus (NS-1)	6 months	07/2020	0/1	CR	MFI	0/2
Pneumocystis carinii (PCAR, 'RRV')	Annually		NT	CR	IFA	0/1
Murine norovirus (MNV)	6 months	07/2020	0/1	CR	IFA	0/2
Rat cytomegalovirus (RCMV)	Annually		NT	CR	IFA	0/1
Bacteria, mycoplasma and fungi						
Cilia-associated respiratory bacillus (CARB)	Annually		NT	CR	MFI	0/1
Mycoplasma pulmonis (MPUL, blood)	6 months	07/2020	0/1	CR	MFI	0/2
Bordetella bronchiseptica (Nasopharynx, lung)	6 months	07/2020	0/1	TAU	CULT	0/2
Citrobacter rodentium (Intestine, feces)	6 months	07/2020	0/1	TAU	CULT	0/2
Clostridium piliforme (CPIL, blood)	6 months	07/2020	0/1	CR	MFI	0/2
Corynebacterium kutcheri (Nasopharynx, lung, intestine)	6 months	07/2020	0/1	TAU	CULT	0/2
Klebsiella pneumoniae (Naso, lung)	6 months	07/2020	0/1	TAU	CULT	0/2
Klebsiella oxytoca (Intestine, feces)	6 months	07/2020	0/1	TAU	CULT	0/2
Pasteurellaceae (Naso, lung)	6 months	07/2020	1/1	TAU	CULT	1/2
Pasteurella pneumotropica						
Pseudomonas aeruginosa (Feces)	6 months	07/2020	0/1	TAU	CULT	0/2
Salmonella spp. (Intestine, feces)	6 months	07/2020	0/1	TAU	CULT	0/2
Staphylococcus aureus (Skin, naso, lung)	6 months	07/2020	0/1	TAU	CULT	0/2
Streptococci β -haemolytic (not group D, naso, lung)	6 months	07/2020	0/1	TAU	CULT	0/2
Streptococcus pneumoniae (Naso, lung)	6 months	07/2020	0/1	TAU	CULT	0/2
Helicobacter spp. (Feces)	6 months	07/2020	NT*	TAU	PCR	NT
Streptobacillus moniliformis (Naso)	6 months	07/2020	0/1	TAU	CULT	0/2
Dermatophytes (Skin)	6 months	07/2020	0/1	TAU	CULT	0/2
Corynebacterium bovis (Skin)	6 months	07/2020	0/1	TAU	CULT	0/2

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Parasites						
Ectoparasites: Fur mites	6 months	07/2020	0/1	TAU	MICR	0/2
Endoparasites: Pinworms	6 months	07/2020	0/1	TAU	MICR	1/2
Opportunistic protozoa	6 months	07/2020	0/1	TAU	MICR	0/2
Nonpathogenic protozoa: Chilomastix, Entamoeba, Trichomonas	6 months	07/2020	Present	TAU	MICR	Present
Pathological lesions						
	6 months	07/2020	0/1	TAU	MACRO	0/2

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; MFI=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

Summary

Serology: the tested rat was positive for Rat theilovirus (RTV).

Bacteriology: the tested rat was positive for *Pasteurella pneumotropica*.

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

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

Pathology: no observed lesions.

Notes: *Viridans* group α -*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.

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