

Health Monitoring Report in Accordance with FELASA Recommendations

Location: **Psychology TAU**

Housing: **Sharett building**

Samples collection: **11/07/2021**

Species: **Rat sentinel**

Strain: **SD females**

Date of report: **21/07/2021**

Health report: **3 rats FELASA Quarterly**

	Test frequency	Latest results positive/tested	Testing laboratory TAU, CR	Test method	Historical results positive/tested	
Viruses		Jul 2021			Jul 2020	Jan 2021
Hantaan (zoonotic hantaan virus-HANT)	Annually	NT	CR	MFIA	0/2	0/2
Toolan's H1-rat parvovirus (H1)	6 months	0/3	CR	MFIA	0/2	0/2
Rodent adenovirus strain 1,2 (MAV1&MAV2)	Annually	NT	CR	MFIA	0/2	0/2
Rat parvovirus (RPV)	6 months	0/3	CR	MFIA	0/2	0/2
Rat minute virus (RMV)	6 months	0/3	CR	MFIA	0/2	0/2
Kilham's rat virus-parvovirus (KRV)	6 months	0/3	CR	MFIA	0/2	0/2
Rodent pneumovirus (PVM)	6 months	0/3	CR	MFIA	0/2	0/2
Rat coronavirus (RCV/SDAV)	6 months	0/3	CR	MFIA	0/2	0/2
Rodent reovirus (REO)	Annually	NT	CR	MFIA	0/2	0/2
Rat theilovirus (RTV)	6 months	0/3	CR	MFIA	2/2	0/2
Sendai virus (SEND)	Annually	NT	CR	MFIA	0/2	0/2
Parvovirus (NS-1)	6 months	0/3	CR	MFIA	0/2	0/2
Pneumocystis carinii (PCAR, 'RRV')	Annually	0/3	CR	IFA	0/2	2/2
Murine norovirus (MNV)	6 months	NT*	CR	IFA	NT	NT
Rat cytomegalovirus (RCMV)	Annually	NT	CR	IFA	0/2	0/2
Bacteria, mycoplasma and fungi		Jul 2021			Jul 2020	Jan 2021
Cilia-associated respiratory bacillus (CARB)	Annually	NT	CR	MFIA	0/2	0/2
Mycoplasma pulmonis (MPUL, blood)	6 months	0/3	CR	MFIA	2/2	1/2
Bordetella bronchiseptica (Nasopharynx, lung)	6 months	0/3	TAU	CULT	0/2	0/2
Citrobacter rodentium (Intestine, feces)	6 months	0/3	TAU	CULT	0/2	0/2
Clostridium piliforme (CPIL, blood)	6 months	0/3	CR	MFIA	0/2	0/2
Corynebacterium kitcheri (Nasopharynx, lung, intestine)	6 months	0/3	TAU	CULT	0/2	0/2
Klebsiella pneumoniae (Naso, lung)	6 months	0/3	TAU	CULT	0/2	0/2
Klebsiella oxytoca (Intestine, feces)	6 months	0/3	TAU	CULT	0/2	0/2
Pasteurellaceae, Pasteurella pneumotropica (Naso, lung)	6 months	2/3	TAU	CULT	0/2	0/2
Pseudomonas aeruginosa (Feces)	6 months	0/3	TAU	CULT	1/2	0/2
Salmonella spp. (Intestine, feces)	6 months	0/3	TAU	CULT	0/2	0/2
Staphylococcus aureus (Skin, naso, lung)	6 months	0/3	TAU	CULT	0/2	0/2
Streptococci β-haemolytic (not group D,naso, lung)	6 months	0/3	TAU	CULT	0/2	0/1
Streptococcus pneumoniae (Naso, lung)	6 months	0/3	TAU	CULT	0/2	0/2
Helicobacter spp. (Feces)	6 months	NT**	TAU	PCR	NT	NT
Streptobacillus moniliformis (Naso)	6 months	0/3	TAU	CULT	0/2	0/1
Dermatophytes (Skin)	6 months	0/3	TAU	CULT	0/2	0/2
Corynebacterium bovis (Skin)	6 months	0/3	TAU	CULT	0/2	0/2

	Test frequency	Latest results positive/tested	Testing laboratory TAU, CR	Test method	Historical results positive/tested	
		Jul 2021			Jul 2020	Jan 2021
Parasites						
Ectoparasites: Fur mites	6 months	0/3	TAU	MICR	0/2	0/2
Endoparasites: Pinworms	6 months	0/3	TAU	MICR	0/2	0/2
Opportunistic protozoa	6 months	0/3	TAU	MICR	0/2	0/2
Nonpathogenic protozoa: Chilomastix, Entamoeba, Trichomonas	6 months	Present	TAU	MICR	Present	Present
Pathological lesions	6 months	0/3	TAU	MACRO	1/2	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; 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: tested rats were negative for all tested pathogens.

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

Bacteriology: two tested rats were positive for *Pasteurella pneumotropica* (samples PS-1 room 1 and PS-3 room 3).

**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, 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).

Dr. Mickey Harlev, Veterinarian
Israeli Board Certified
Head of the Veterinary Service Center
Tel Aviv University, Tel Aviv, Israel
Mobile: 972-52-5643396
Office: 972-3-6409919; Fax: 972-6407567
mickey@tauex.tau.ac.il

Dr. Debora Rapaport, PhD
Manager of Sentinel Diagnostic Laboratory
Department of Clinical Microbiology and Immunology
Sackler Faculty of Medicine <https://en-med.tau.ac.il/safety-on-fculty-of-mdicine2020>
Tel Aviv University, Tel Aviv, Israel
Lab: 972-3-6405137; Fax: 972-3-6409160
debirapa@tauex.tau.ac.il