

EMMA health monitoring procedures

Brief description of housing system, health monitoring programme and health status of the EMMA SPF live colonies

Type of facility

Animals distributed by EMMA are bred in SPF (Specific Pathogen Free) barriered facilities in which all materials are sterilized before entry. Staff entering the barriered areas must shower and change into clean unit clothing. Where appropriate, staff working within the units is also required to wear, gloves, face masks, mob caps and over shoes.

Housing system

Animals are maintained in either flexible film isolators or IVCs (Individually Ventilated Cages) or in conventional cages in barriered areas under positive pressure and are given autoclaved bedding, autoclaved or irradiated food and filtered or chlorinated water. Animals reared in IVCs are cage changed under laminar flow hoods.

Sentinel programme

The health status of each animal room is monitored on a regular basis e.g. 4 times per year when mice are reared in IVCs or monthly when mice are bred in conventional cages in barriered areas. These screening programmes involve exposing sentinel animals to dirty bedding collected from other IVCs within the mouse room. Some colonies e.g. those reared in isolators are sampled directly.

Health report

Before receiving any mice from EMMA you will be sent a recent (< 3 months old) health report prepared in accordance with the FELASA (Federation of European Laboratory Animal Science) recommendations. This health report will give details of the agents tested, the number of animals tested and the analytical methods used.

The following pages provide a sample health report from the EMMA node that distributes the strain you are interested in. Note that this is a **sample** health report and **not a current report**. Current reports will be provided upon request. Additional specific health checks (beyond tests recommended by FELASA) are possible if required by customers for importation but will be charged to the customer. If you require any further information please contact the archiving/distribution centre handling your request.

Health monitoring report
In accordance with FELASA recommendations

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		30 Jun 2020	20 Apr 2020	11 Nov 2019	3 Sept 2019	20 May 2019	Dec 2014 - Dec 2018	Test laboratory	Test method
Date of issue: 9 th July 2020		Unit type: Full barrier							
Location: Mouse barrier, Oulu Laboratory Animal Centre, University of Oulu		Housing type: IVCs and open cages							
Species sampled: Mouse		Species within the unit: Mouse							
Sampling: Outbred CD1 sentinel mice, one from every animal room									
Viruses									
Minute virus of mice (MVM)		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Mouse parvovirus (MPV)		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Mouse parvovirus (MLNs)		NT	0/10	NT	NT	0 / 10	0 / 49	SDL	PCR
Mouse parvovirus (faeces, pooled room samples)		0/8	0/8	0/8	0/8	0 / 8	0 / 66	SDL	PCR
Mouse hepatitis virus (MHV)		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Pneumonia virus of mice (PVM)		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Reovirus type 3		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Sendai virus		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Mouse rotavirus (EDIM)		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Theiler's murine encephalomyelitis virus (TMEV)		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Mouse norovirus (MNV)		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
Mouse norovirus (faeces, pooled room samples)		0/8	0/8	0/8	0/8	0 / 8	0 / 92	SDL	RT-PCR
Ectromelia virus		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Lymphocytic choriomeningitis virus (LCMV)		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Mouse adenovirus (Mad FL)		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Mouse adenovirus (Mad K87)		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Mouse cytomegalovirus (MCMV)		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Hantaan virus		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Polyoma virus		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
K-virus		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Lactate dehydrogenase elevating virus (LDEV)		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Mouse thymic virus (MTV)		NT	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead
Bacteria, mycoplasma and fungi									
<i>Citrobacter rodentium</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Cult
<i>Clostridium piliforme</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
<i>Corynebacterium kutscheri</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Cult
<i>Helicobacter spp.</i> (faeces, pooled room samples)		0/8	0/8	0/8	0/8	0 / 8	0 / 92	SDL	PCR
<i>Mycoplasma pulmonis</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Bead
<i>Pasteurellaceae</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Cult
<i>Pasteurella pneumotropica</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	PCR
<i>Pseudomonas aeruginosa</i>		0/10	0/10	0/10	0/10	0 / 10	1 / 137 ¹⁾	SDL	Cult
<i>Salmonella spp.</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Cult
<i>Staphylococcus aureus</i>		0/10	0/10	0/10	0/10	0 / 10	6 / 137 ²⁾	SDL	Cult
Streptococci, β-haemolytic		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Cult
<i>Streptococcus pneumoniae</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Cult
<i>Streptobacillus moniliformis</i>		0/10	0/10	0/10	0/10	0 / 10	0 / 137	SDL	Cult
Parasites									
Ectoparasites		0/10	0/10	0 / 10	0 / 10	0 / 10	0 / 137	OULAC	Micr
Endoparasites	Duodenum	0/10	0/10	0 / 10	0 / 10	0 / 10	0 / 127	OULAC/FFA	Micr
	Caecum	0/10	0/10	0 / 10	0 / 10	0 / 10	0 / 127	OULAC/FFA	Micr
	Faecal helminth eggs	0/10	0/10	0 / 10	0 / 10	0 / 10	0 / 127	FFA	Flot
	<i>Encephalitozoon cuniculi</i>	0/10	0/10	NT	NT	0 / 10	0 / 38	SDL	Bead

¹⁾ Positive result 5.5.2015 from immunocompromised (nude) sentinels

²⁾ Two positive results 5.5.2015, four positive results 13.12.2016

The barrier was emptied, disinfected and repopulated in December 2014.

Abbreviations used in this report:

Bead	Multiplexed immunoassay
Cult	Culture
FFA	Laboratory of the Finnish Food Authority, Oulu
Flot	Faecal flotation
OULAC	Oulu Laboratory Animal Centre, University of Oulu
Micr	Microscopy
MLN	Mesenteric lymph node
NT	Not tested
PCR	Polymerase chain reaction
RT-PCR	Reverse transcription polymerase chain reaction
SDL	Surrey Diagnostics Ltd, University of Surrey

Oulu, 9th July 2020

Place and date

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