

Data record form for the characterisation of transgenic animal lines 2

 Cover sheet for a complete litter or animals of the same cage2

 Identification of living offspring3

 Birth and first 24 h; first inspection following birth (inspection date)4

 Ontogenesis 1 (2nd - 10th day)5

 Ontogenesis 1 (2nd - 10th day, cont.): Neurobehavioural Tests6

 Ontogenesis 2 (11th – weaning day).....7

Individual sheets..... 8

 Ontogenesis 2 (11th day - weaning)8

 Ontogenesis 3 (4th – 12th week of life).....9

 Ontogenesis 3 (4th – 12th week of life, cont.) 10

 Young adults, breeding animals (7th – 12th week of life) 11

Line name:

Consecutive litter No.:
ID cage:

Date of birth:
Generation:

Sheet: 2

Data record form for the characterisation of transgenic animal lines

Cover sheet for a complete litter or animals of the same cage

Offspring			Parents	
Line name (nomenclature in accordance with ILAR News 34 (4), pp. 45-52, 1992):			Genotype incl. status (-/-, +/+, +/-, +/-?)	f: m:
Generation litter and date of birth / sectio *:			Generation of transgenic parents: F0, F1, F2, F3, F _n	f: m:
No. of stillborn offspring (alive and dead):			Age at time of mating / weight	f: m:
Male/female ratio _: _:			Marking (foot tattoo / ear marking *)	f: m:
	Consecutive litter No.:	ID cage:	Type of mating (permanent/ intermittent)	

Date	Observations:

Line name:

Consecutive litter No.:

Date of birth:

Sheet: 3

ID cage:

Generation:

Identification of living offspring

Foot tattoo (1-15):	Special characteristics at the time of birth e.g. colour, size, anomalies	Sex (at the time of weaning)	Typing (tail biopsy no earlier than 4 weeks old)	Ear marking (1-99) (simultaneously with tail biopsy)	Observations (especially death)
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
Sample remaining (dead/remaining):					

Line name:

Consecutive litter No.:
ID cage:

Date of birth:
Generation:

Sheet: 4

Birth and first 24 h; first inspection following birth (inspection date =)

Individual (foot tattoo)	1	2	3	4	5	6	7	8	9	10	Entire litter ... identical	Observations
Characteristic												
Dead/died												
Lying in the nest												
Lying beside the nest												
Weight												
Skin colour ¹⁾												
Stomach contents ¹⁾												
Maturity ¹⁾												
Body size ²⁾												
Body proportions ³⁾												
<u>Distinctive features</u> ³⁾ :												
Head												
Trunk												
Extremities												
Tail												

1) +/- = satisfactory / not satisfactory

2) d/n/g = dwarf/normal/giant

3) x = distinctive feature

Ontogenesis 1 (2nd - 10th day)

Malformations (underline where applicable, giving details of the animals affected or the number of affected animals):

head, eyes, ears, nose, mouth, skeleton, legs, paws, posture, limb position, musculature, skin, fur, vibrissae, tail.

Recording date (approx. every 2 days):	Check No. 1:	Check No. 2:	Check No. 3:	Check No. 4:
= day of life:				

Animal No.	1				2				3				4				5				6				7				8				9				10			
Check-No.	1	2	3	4	1	2	3	4	1	1	2	3	4	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Dead/ euthanised *																																								
(Partially) eaten																																								
Lying in the nest																																								
Lying beside the nest																																								
Weight (g)																																								
Size in litter comparison ¹⁾																																								
Skin colour ¹⁾																																								
Turgor ¹⁾																																								
Stomach contents ¹⁾																																								
Reactivity ¹⁾																																								
Body orifices clean ²⁾																																								
Start of fur growth ³⁾																																								
spec. rearing ⁴⁾																																								

- 1) +/- = satisfactory /not satisfactory
- 2) ✓ = OK
- 3) x = detected for the first time
- 4) **A** = foster mother, **W** = litter reduction, **V** = preselection,

Ontogenesis 1 (2nd - 10th day, cont.): Neurobehavioural Tests

The following clarifications or tests are to be carried out **before the eyes are opened**, on day 10 ± 1

Date of test / age of animals:

N.B. Ability to find its way back to the nest, pivoting/crawling/walking and eye opening are observed and recorded as a part of the daily routine.

Animal No.	1	2	3	4	5	6	7	8	9	10	Observations
Day of life at the time of testing											
finds its way back to the nest ¹⁾											
pivoting) ¹⁾											
crawling) ¹⁾											
walking) ¹⁾											
eyes open ¹⁾											
weight at the time of testing											
righting ²⁾											
forelimb grasping ³⁾											
vibrissa placing ³⁾											
pole grasping ⁴⁾											
teething ³⁾											

- 1) Age (= in days until day 11), at which the particular development stage was noted
- 2) righting scores: **0** = > 10 sec., **1** = 5 - 10 sec., **2** = 3 - 5 sec., **3** = 1 - 2 sec.
- 3) ✓/0 = available and normal / not available or abnormal
- 4) pole grasping scores: **0** = < 2 sec., **1** = 2 - 5 sec., **2** = 6 - 10 sec., **3** = > 10 sec.

Ontogenesis 2 (11th – weaning day)

For the hearing test (auditory startle) it must be ensured that the auditory canal is open (a few days after opening the eyes). Pole grasping is only re-tested at this stage of life with those animals which exhibited unsatisfactory results in Ontogenesis 1 (scores 0 and 1).

Date of tests:

N.B. The ability to find its way back to the nest, locomotive development (pivoting/crawling/walking), and eye opening as well as teething are observed and recorded as a part of the daily routine. **These clarifications are only to be carried out and noted on this sheet (at the latest at the time of weaning), if it has not been possible to answer them positively under "Ontogenesis 1" (sheet 5).**

Animal No.	1	2	3	4	5	6	7	8	9	10	Observations
Day of life at the time of testing											
finds its way back to the nest ¹⁾											
pivoting) ¹⁾											
crawling) ¹⁾											
walking) ¹⁾											
eyes open ¹⁾											
teething ¹⁾											
auditory startle ²⁾											
pole grasping ³⁾											

1) if not positive up to that time: age (from 11th day of life) at which the particular development stage was noted.

2) ✓/0 = available and normal / not available or abnormal

3) pole grasping scores: **0** = < 2 sec., **1** = 2 - 5 sec., **2** = 6 - 10 sec., **3** = > 10 sec.

Individual sheets

Ontogenesis 2 (11th day - weaning)

Date of observation	1:	2:	3:	4:= weaning	Observations
Day of life					
Dead/euthanised *					
Weight (g)					
Respiration ¹⁾					
Hair coat (e.g. bald spots) ¹⁾					
Body orifices (e.g. discharge) ¹⁾					
Excreta (e.g. diarrhoea) ¹⁾					
Attentiveness, reactivity ¹⁾					
Explorative behaviour, activity ¹⁾					
Clinical symptoms of illness					
Convulsions, spasms ²⁾					
Lethargy, paresis ²⁾					
Ataxia ²⁾					
Dehydration ²⁾					
Sunken eyes ²⁾					
Rough hair coat ²⁾					
Huddled-up posture ²⁾					
Neoplasia ²⁾					

1) ✓/x = satisfactory (i.e. without findings)/ unusual or clinical finding, missing behaviour

2) Yes/no

Sex, determined (confirmed) at weaning:

Malformations observed at weaning (underline where applicable):

head, eyes, ears, nose, mouth, skeleton, legs, paws, posture, limb position, musculature, skin, fur, vibrissae, tail, external genitals

Line name: Consecutive litter No.: Date of birth: Sheet: 9
 No. of animal sex: ID cage: Generation:

Ontogenesis 3 (4th – 12th week of life)

Week of life	4	5	6	7	8	9	10	11	12	Observations
from to										
Dead/euthanised *										
Weight (g)										
Respiration ¹⁾										
Hair coat (e.g. bald spots) ¹⁾										
Body orifices (e.g. discharge) ¹⁾										
Excreta (e.g. diarrhoea) ¹⁾										
Clinical symptoms of illness										
Marked changes in weight ²⁾										
Convulsions, spasms ²⁾										
Lethargy, paresis ²⁾										
Muscular atrophy ²⁾										
Ataxia ²⁾										
Dehydration ²⁾										
Automutilation ²⁾										
Sunken eyes ²⁾										
Rough hair coat ²⁾										
Huddled-up posture ²⁾										
Neoplasia ²⁾										

1) ✓/x = without findings, OK/ clinical symptoms

2) yes/no

Line name: Consecutive litter No.: Date of birth: Sheet: 10
 No. of animal sex: ID cage: Generation:

Ontogenesis 3 (4th – 12th week of life, cont.)

Week of life	4	5	6	7	8	9	10	11	12	Observations
from to										
Attentiveness, reactivity ¹⁾										
Explorative behaviour, activity ¹⁾										
Comfort behaviour ¹⁾										
Feeding behaviour ¹⁾										
Drinking behaviour ¹⁾										
<u>Locomotion, motor behaviour:</u>										
walking ¹⁾										
raising ¹⁾										
digging ¹⁾										
climbing ¹⁾										
<u>Social behaviour:</u>										
Not observable/ kept singly										
Mostly social (stays within group) ²⁾										
Mostly isolated (not interacting) ²⁾										
Aggressive towards conspecifics ²⁾										
Recipient of aggressions ²⁾										

1) ✓/x = without findings, OK/ unusual or clinical finding, missing behaviour

2) yes/no

Line name: Consecutive litter No.: Date of birth: Sheet: 11
 No. of animal sex: ID cage: Generation:

Young adults, breeding animals (7th – 12th week of life)

age at first time of mating:

Week of life	7	8	9	10	11	12	observations
Successful gestation ¹⁾ *							
No. of offspring in the first litter							
No. of offspring still alive at weaning							
Cannibalism ¹⁾							
Milkproduction one day after birth ²⁾							
Rearing behaviour of the mother ²⁾							
Spontaneous reproduction ¹⁾							

1) yes/ no

2) ✓/x = satisfactory/ not satisfactory

* if gestation fails during 6 weeks of mating : test for sterility