



This standard protocol must be completed by all ILAB customers prior to any experiments commencing. The protocol can be submitted electronically. The following pages must be completed and signed if experiments are to be carried out in the respective zones.

Page 1 and 2: None-infectious experiment.

Page 1 and 3: Infectious experiment and/or contained use of GMO/GMM.

Page 1, 2 and 3: Experiment starting in an aqua facility and end in disease- / contained GMO-facilities.

Page 4: Comments to page 1, 2 and 3.

ILAB 23/43800 - 2: Approval of laboratories and facilities for contained use of genetically modified animals and animals in combination with genetically modified microorganisms.

Includes an approval for immunization of fish in aquahalls, with plasmid-based DNA vaccines. Each individual vaccine must be applied for and approved by the HD before starting. If environmental risk is not approved, immunization must take place in the disease facility. If the fish then are to be infected, the fish must be moved to a disease facility.

1. Project- / ID name (green areas are completed by ILAB, yellow areas are completed by customers):

1.1.1 Project- / ID name (completed by customer): 1.1.2 Exp. No. (completed by ILAB):

1.2 Experimental fish: ILAB batch: Other:

2. Customer:

2.1. Customer name:

2.2. Customer's version number:

2.3. Does this experiment require 'FOTS' approval: Tick box if 'YES' 2.4 If approved insert ID-no:

2.5. Name of person with LAS approval:

2.6 Use of GMO/GMM: 'YES' 2.7 The Norwegian Directorate of Health have to consider and approve the use of each GMM/GMO in combination with animals or each DNA vaccine, before start-up. Customer must send in application found at HD website. When an approval is available, the customer reports further use to HD upon repetition. ILAB shall always be sent an e-mail copy of applications or messages to HD (post@ilab.no). Tick for applied/reported: Doc.no. for approval: Doc.no. notice of use:

2.8 Tick if experiment include (one or more)
 Immunization with a DNA-based vaccine, with subsequent sampling Immunization with a DNA-based vaccine, before additional infection experiment in the disease facility. Contained use of GMO-animals or animals in combination with GMM.

3. Time:

3.1 Experiment start / completion (date or week number):
 Aqua facility:

Start	Completion
<input type="text"/>	<input type="text"/>

3.2 Experiment start / completion (date or week number):
 Disease facility:

<input type="text"/>	<input type="text"/>
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4. Fish tanks:

4.1. Number of tanks and sizes required:
 Aqua facility:

Ø 2 meter	1.5 x 1.5 meter	450 - 500 L	0.6 x 0.6 meter
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

4.2. Number of tanks and sizes required:
 Disease facility:

1.5 x 1.5 meter	450 - 500 L	0.6 x 0.6 meter
<input type="text"/>	<input type="text"/>	<input type="text"/>

5. Areas of responsibility:

5.1. Daily feeding / husbandry: Customer responsibility: ILAB responsibility:
 5.2. Sample taking: Customer responsibility: ILAB responsibility:
 5.3. Registration of dead fish: Customer responsibility: ILAB responsibility:

5.4. Other (provide details in field for comments) :

6. Report:

6.1. Final report is required (additional cost): Tick box if 'YES'

7. Use of chemicals (ILAB acquires SDS-sheet for any hazardous chemicals used): SDS-sheet attached SDS will be sent Not applicable SDS-sheet already sent

8. Any deviations from this protocol must be reported to: Name: Phone: E-mail:

9. Comments (if extended information is needed use page 4):

Provide details of experiment parameters on page 2 and/or page 3.

Date and signature: DD.MM.YYYY Signature customer:

HD = Norwegian Directorate of Health
 FOTS = The experimental animal administration's supervisory and application system
 LAS = Course in experimental animal science (LAS/Felasa)
 GMO = Genetically modified organisms
 GMM = Genetically modified microorganisms



1.1.1 Project-/ experiment ID name (completed by customer): 1.1.2 Exp. No. (completed by ILAB):

2.2. Customer's version number: Green boxes completed by ILAB

3.1.1 Start / completion date (date or week number):
 Start Completion
 Room Fishtanks Tick box if 'NO'

4.1.2 Acclimation of fish: Tick box if 'NO'

4.1.2.1 Acclimation regime (if extended information is needed use page 4):

10. Fish:
 10.1 Species and size of fish: Species: Required size (g) Min. size Max. size Average/calc. gram
 10.2 Fish batch: Customer's ref. ILAB's ref.

5.5 Starved prior to moving / handling: Tick box if 'YES' If 'YES' state no. of hours

4.1.3. Fish are moved from: Room and Tank Checked, OK

Room and Tank	No. of fish	Washed & desinf.	Room and Tank	No. of fish	Washed & desinf.
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

4.1.4. Trial tanks - number of fish per tank:

10.3. Number of fish groups and 10.4. Labelling of fish: (if extended information is needed use page 4)

11. Water quality:
 11.1. Temperature: Set value °C Lower °C Upper °C ILAB standard: <https://ilab.no/nedlastninger/> Level alarm Alarm set
 11.2. Salinity (ppt): ‰ Lower ‰ Upper ‰ Tick box if 'YES' Alarm set
 11.3. Oxygen (% saturation): % Lower % Upper % Tick box if 'YES' Checked, OK
 11.4. Flowrate (liters of water per kg fish per minute): % Tick box if 'YES' Checked, OK

10.5.1. Biomass per tank at start: kg
 10.5.2. Expected max. biomass per tank: kg
 10.5.3. Removal of biomass during experiment: kg week week week

12.1. Light regime: 12:12 Tick if 'YES' 24:00 Tick if 'YES' Natural, Bergen Tick if 'YES' Other, specify Checked, OK

5.6. Feeding: Automated (24 hours) Hand feeding Other, specify Checked, OK
 Standard ILAB automated (08:00 - 18:00)

5.7. Food collection: Tick if 'NO' Tick if 'YES' Checked, OK

5.8. Storage and labelling of dead fish: Work days (M T W T F): °C Checked, OK
 Weekend / holidays (S S): °C

8.1. Experiment contact person: Name:
 Phone:
 E-mail:

9.1. Comments (if extended information is needed use page 4):

DD.MM.YYYY Signature ILAB:
 DD.MM.YYYY Signature customer:



1.1.1 Project-/ experiment ID name (completed by customer): 1.1.2 Exp. No. (completed by ILAB):

2.2 Customer's version number:

3.1.1 Start / completion date (date or week number):
 Start Completion

4.2.2 Acclimation of fish:
 Room Fish tank Tick box if 'NO'

4.2.2.1 Acclimation regime (if extended information is needed use page 4):

10. Fish:
 10.1 Species and size of fish: Species: Required size (g) Min. size Max. size Average / calc. gram
 10.2 Fish batch: Customer's ref. ILAB's ref. If 'YES', state number of hours

5.5 Starving prior to moving / handling: Tick box if 'YES'

4.2.3. Fish are moved from: Room and Tank Checked, OK

4.2.4. Number of fish per tank:

Room and Tank	No. of fish	Washed & desinf.	Room and Tank	No. of fish	Washed & desinf.
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>
<input type="text"/>	<input type="text"/>	<input type="checkbox"/>	<input type="text"/>	<input type="text"/>	<input type="checkbox"/>

10.3. Number of fish groups and 10.4. Labelling of fish: (if extended information is needed use page 4)

11. Water quality:
 11.1. Temperature: Set value °C Lower °C Upper °C Standard ILAB: <https://ilab.no/nedlastninger/> Tick box if 'YES' Level alarm Alarm set
 11.2. Salinity (ppt): ‰ ‰ ‰ Tick box if 'YES' Alarm set
 11.3. Oxygen (% saturation): % % % Tick box if 'YES' Checked, OK
 11.4. Flowrate (liter water per kg fish per minute): Tick box if 'YES' Checked, OK

10.5.1. Biomass per tank at start: kg
 10.5.2. Expected max. biomass per tank: kg
 10.5.3. Removal of biomass during experiment: g week week week

12.1. Light regime: 12:12 Tick if 'YES' 24:0 Tick if 'YES' Natural, Bergen Tick if 'YES' Other, specify Checked, OK

5.6. Feeding: Automated (08:00 - 18:00) Automated (24 hours) Other, specify Standard ILAB (hand feeding) Checked, OK

5.7. Food collection: Tick if 'NO' Tick if 'YES' Checked, OK

5.8. Storage and labelling of dead fish: Work days (M T W T F): °C Weekend / holidays (S S): °C Checked, OK

13. Infections:
 13.1. Methodology (if extended information is needed use page 4):

13.2. Use of attenuated vaccine (must be carried out in disease facility): Tick if 'YES' Tick if 'NO'

13.3. Possible human pathogen (if YES, special approval is required): Tick if 'YES' Tick if 'NO'

13.4. Pathogen (name): 13.5. GMO/GMM name:

8.1. Experiment contact person: Name: Phone: E-mail:

9.2. Comments (if extended information is needed use page 4):

DD.MM.YYYY Signature ILAB:

DD.MM.YYYY Signature kunde:

