

PatoGen encourages all customers to use our registration portal PatoLink. This ensures that you as a customer get the best conditions, that information and thus quality is secured, and that we save the environment and nature.



## REQUISITION FORM: SAMPLES TO PATOGEN

Fields marked with \* are mandatory. Optional fields must be filled if you want the information in the final report. For mandatory analyses all fields must be filled.

### CUSTOMER DETAILS

<b>Company*</b> (formal report recipient)		<b>Invoice company*</b> (if different from company)	
<b>Sampler*</b> (full name, receives report)		<b>Invoice contact*</b> (full name)	
<b>Sampler*</b> (email and mobile)		<b>Invoice reference</b> (ex. PO number)	
<b>Report recipient</b> (full name)		<b>Report recipient</b> (email)	
<b>Project number</b>	NB: If the samples are part of a project with PatoGen, the project number must be filled out. If the project number is missing, the samples will be invoiced as normal.		

### SAMPLING DETAILS

<b>Sampling date*</b>		<b>Site number*</b>	
<b>Species*</b>		<b>Site name</b>	
<b>Fish group</b>		<b>Breed</b>	
<b>Generation</b>		<b>Production</b>	<input type="radio"/> Sea water <input type="radio"/> Fresh water <input type="radio"/> Brood stock
<b>Vaccinated fish?*</b>	<input type="radio"/> Yes <input type="radio"/> No If yes, which vaccine? .....		
<b>Water environment*</b>	<input type="radio"/> Salt water <input type="radio"/> Fresh water <input type="radio"/> Fresh water with salt water addition		

### REPORTING OF STATUTORY ANALYSES

For statutory analyses, and with suspicion of serious/listed diseases, PatoGen is required to notify the Norwegian Food Safety Authority of positive analyses. In cases like these, PatoGen will inform the customer first. For statutory analyses PatoGen is also required to send monthly summaries of the analysis results to the national reference laboratory. We refer to the at any time current regulations of the Ministry of Trade, Industry and Fisheries.

### GENERAL DELIVERY CONDITIONS

See patogen.com for our general terms of delivery, sampling guides, recommended area of use for analysis and more. Haste samples must be agreed upon in advance, and must be given within time limits. You can modify on your order's delivery time until the samples are received and confirmed at our laboratories. The requisition form is changed/updated on a regular basis. The newest and valid version of the requisition form is always available at patogen.com.

Regarding deliveries for the various services in PatoGen, see below the respective pages.

Reservation against use in research, commercial and operational purposes in anonymized form.

### NOTE

### SIGNATURE

#### Date and sampler's signature

Confirmation of read/understood which species and geographical areas the ordered analyses are recommended for. See patogen.no for overview of recommended area of use, under forms and guides.

PatoGen | +47 70 11 69 00 | post@patogen.no | patogen.com | Version 4.8 | Valid from 26.03.26

Received:	Water:	Histology:	PCR:
Tray:	PatoGen return note: Yes No	Biochemistry:	Bacteriology:
			Control:

### DELIVERY PCR

- Normal (3 working days)
- Haste 1 (1 working day)
- Haste 2 (2 working days)

Haste 1 must be agreed upon in advance at +47 70 11 69 00 / post@patogen.no.  
 Haste 1 requires delivery of samples before 09.00 and entails a 100 % additional cost.  
 Haste 2 requires delivery of samples before 12.00 and entails a 50 % additional cost.

### PATOSAFE (PCR ANALYSES)

Check left for required analysis and fill in which tissue you want the analysis to be performed on to the right. Tissue is a mandatory field. If tissue is not filled, optimal tissue will be chosen from recommended tissue in the sampling guide. The list below shows short names for the analyses. We refer to the analysis overview for complete analysis name, in addition to which geographical areas and species the analyses are recommended for. Analysis overview and sampling guides are available at [www.patogen.com](http://www.patogen.com).

Required analysis:	Tissue*:
Aeromonas salmonicida type 1-23	
Aeromonas salmonicida subsp. sal.	
Aeromonas salmonicida type 5	
Aeromonas salmonicida type 6	
AGD - Paramoeba perurans	
Aliivibrio wodanis <sup>2</sup>	
Atlantic salmon paramyxovirus <sup>2</sup>	
Ballan wrasse birnavirus <sup>1</sup>	
BKD - Renibacterium salmoninarum <sup>**</sup>	
Ca. Branchiomonas cysticola	
Ca. Piscichlamydia salmonis	
Carnobacterium maltaromaticum <sup>2</sup>	
Cod poxvirus <sup>2</sup>	
Costia - Ichthyobodo necator	
Costia - Ichthyobodo salmonis	
Flavobacterium psychrophilum <sup>**</sup>	
Francisella <sup>**</sup>	
Gyrodactylus salaris	
IHNV	
IPNV <sup>**</sup>	
IPNV GG5 and Variant <sup>8</sup>	
ISAV <sup>**</sup>	
ISAV-HPR0 <sup>**</sup>	
Lumpfish coronavirus	
Lumpfish totivirus <sup>2</sup>	
Lumpsucker virus <sup>5</sup>	
Moritella viscosa	
Moritella viscosa Classic and Variant <sup>8</sup>	

### OTHER SERVICES

Storage of samples		Tissue	
--------------------	--	--------	--

### ADDITIONAL INFORMATION

Required analysis:	Tissue*:
Mycobacterium <sup>2,6</sup>	
Nodavirus <sup>**</sup>	
Nucleospora cyclopteri	
Paranucleospora theridion	
Parvicapsula pseudobranchicola	
Phocoenobacter atlanticus	
Phocoenobacter atl. + sky. O1	
Phocoenobacter skyensis O2	
Piscirickettsia spp. <sup>**</sup>	
Piscirickettsia salmonis	
Piscirickettsia nova	
PMCV	
PRV-1 <sup>**</sup>	
PRV-3	
Pseudomonas anguilliseptica	
Salmon poxvirus <sup>4</sup>	
Salmoxcella vastator	
Saprolegnia spp.	
SAV/PDV <sup>**</sup>	
SAV2 and SAV3 <sup>**8</sup>	
Tenacibaculum maritimum	
Tenacibaculum spp. <sup>7</sup>	
VHSV <sup>**3</sup>	
Vibrio anguillarum + ordalii	
Yersinia ruckeri	
Yersinia ruckeri CC1	

<sup>\*\*</sup>Accredited analyses <sup>1</sup>Patent NO347379 <sup>2</sup>Analysis under development, validation performed on a limited amount of material <sup>3</sup>Detects genotype I-III  
<sup>4</sup>Patent NO346439 <sup>5</sup>Patent NO344051 <sup>6</sup>Two analyses are performed to cover multiple species. Detects *Mycobacterium salmoniphilum* and closely related species and *Mycobacterium marinum* and closely related species <sup>7</sup>The analysis does not detect *Tenacibaculum maritimum* <sup>8</sup>Subtyping can be performed following positive detection in the general analysis

### VACCINE DIFFERENTIATION

Vaccine differentiation is done to determine if a positive result is a virus or a vaccine component, and will be performed after the first version is released. Vaccine differentiation will entail increased cost and a new report. We routinely perform differentiation for specific vaccine components:  
 IPNV - ex. ALPHA JECT micro<sup>®</sup> 6

Vaccine differentiation?  Yes  No

KIT NO:

EXPIRATION DATE:



**SAMPLE DETAILS**

H=Healthy, M=Moribund, D=Dead

Pos.	Tube ID PCR	Fish no.	Pen/tub/ cylinder	Clinical signs*			Note
				H	M	D	
A01							
B01							
C01							
D01							
E01							
F01							
G01							
H01							
A02							
B02							
C02							
D02							
E02							
F02							
G02							
H02							
A03							
B03							
C03							
D03							
E03							
F03							
G03							
H03							
A04							
B04							
C04							
D04							
E04							
F04							
G04							
H04							
A05							
B05							
C05							
D05							
E05							
F05							
G05							
H05							
A06							
B06							
C06							
D06							
E06							
F06							
G06							
H06							

KIT NO:

EXPIRATION DATE:



**SAMPLE DETAILS**

H=Healthy, M=Moribund, D=Dead

Pos.	Tube ID PCR	Fish no.	Pen/tub/ cylinder	Clinical signs*			Note
				H	M	D	
A07							
B07							
C07							
D07							
E07							
F07							
G07							
H07							
A08							
B08							
C08							
D08							
E08							
F08							
G08							
H08							
A09							
B09							
C09							
D09							
E09							
F09							
G09							
H09							
A10							
B10							
C10							
D10							
E10							
F10							
G10							
H10							
A11							
B11							
C11							
D11							
E11							
F11							
G11							
H11							
A12							
B12							
C12							
D12							
E12							
F12							
G12							
H12							

**DELIVERY SMOLTTIMER**

- Normal** (3 working days)
- Haste 1** (1 working day)
- Haste 2** (2 working days)

Haste 1 must be agreed upon in advance. Haste 2 agreed in advance will be prioritized.  
 Haste 1 requires delivery of samples before 09.00 and entails a 100 % additional cost.  
 Haste 2 requires delivery of samples before 12.00 and entails a 50 % additional cost.

<b>Sea launch*</b>		<b>Water temperature*</b>	
<b>Salinity</b>		<b>Light</b>	
<b>Note</b>			

**Remember to cut out the entire 2nd gill arch on the left side.**  
**A submission of 30 gill arches is recommended in order to obtain a representative sample set.**

Fish	Fish no.	Pen/tub/cylinder	Weight*	Lenght*	Silver*	Fins*	Parr*
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							

## DELIVERY

- Normal (3 working days)
- Haste 1 (1 working day)
- Haste 2 (2 working days)

Haste can only be delivered if filtering has been carried out.

Haste 1 must be agreed upon in advance at +47 70 11 69 00 / post@patogen.no.  
Haste 1 requires delivery of samples before 09.00 and entails a 100 % additional cost.  
Haste 2 requires delivery of samples before 12.00 and entails a 50 % additional cost.

## ANALYSES

Check left for required analysis. The list below shows short names for the analyses. We refer to the analysis overview for complete analysis name, in addition to which geographical areas and species the analyses are recommended for. Analysis overview and sampling protocol are available at [www.patogen.com](http://www.patogen.com).

Required analysis**:		Required analysis**:		Required analysis**:	
	Aeromonas salmonicida type 1-23		IPNV		PMCV
	Aeromonas salmonicida subsp. sal.		ISAV		PRV-1
	Aeromonas salmonicida type 5		ISAV-HPR0		PRV-3
	Aeromonas salmonicida type 6		Lumpfish coronavirus		Pseudomonas anguilliseptica
	AGD - Paramoeba perurans		Lumpfish totivirus <sup>2</sup>		Salmon poxvirus <sup>4</sup>
	Aliivibrio wodanis <sup>2</sup>		Lumpsucker virus <sup>5</sup>		Salmoxcellia vastator
	Atlantic salmon paramyxovirus <sup>2</sup>		Moritella viscosa		Saprolegnia spp.
	Ballan wrasse birnavirus <sup>1</sup>		Moritella viscosa Classic and Variant <sup>8</sup>		SAV/PDV
	BKD - Renibacterium salmoninarum		Mycobacterium <sup>2,6</sup>		SAV2 and SAV3 <sup>8</sup>
	Ca. Branchiomonas cysticola		Nodavirus		Tenacibaculum maritimum
	Ca. Piscichlamydia salmonis		Nucleospora cyclopteri		Tenacibaculum spp. <sup>7</sup>
	Carnobacterium maltaromaticum <sup>2</sup>		Paranucleospora theridion		VHSV <sup>3</sup>
	Cod poxvirus <sup>2</sup>		Parvicapsula pseudobranchicola		Vibrio anguillarum + ordalii
	Costia - Ichthyobodo necator		Phocoenobacter skyensis O2		Yersinia ruckeri
	Costia - Ichthyobodo salmonis		Phocoenobacter atlanticus		Yersinia ruckeri CC1
	Flavobacterium psychrophilum		Phocoenobacter atl. + sky. O1		
	Francisella		Piscirickettsia spp.		
	Gyrodactylus salaris		Piscirickettsia salmonis		
	IHNV		Piscirickettsia nova		

\*\* Analyses related to WaterScreening are subject to PatoGen's standard quality system and are validated, but not accredited. Water filtration has been validated on a limited amount of material <sup>1</sup>Patent NO347379 <sup>2</sup>Analysis under development, validation performed on a limited amount of material <sup>3</sup>Detects genotype I-III <sup>4</sup>Patent NO/EP3237607 <sup>5</sup>Patent NO344051 <sup>6</sup>Two analyses are performed to cover multiple species. Detects *Mycobacterium salmoniphilum* and closely related species and *Mycobacterium marinum* and closely related species <sup>7</sup>The analysis does not detect *Tenacibaculum maritimum* <sup>8</sup>Subtyping can be performed following positive detection in the general analysis

**SAMPLE DETAILS**

	Sampling date	Sampling time	Salinity	Temperature	Taken from	Amount filtered	Note
A							
B							
C							
D							
E							
F							
G							
H							
I							
J							
K							
L							
M							
N							
O							
P							
Q							
R							
S							
T							
U							
V							
W							
X							
Y							
Z							

**ATTENTION! All diagnostic samples must be sent directly to our partner Frst Medisinsk Laboratorium in Oslo. We encourage the use of the return label from PatoGen. All information must be registered in PatoLink. Deviations result in delayed delivery times.**

**DELIVERY HISTOLOGY**

- Normal** (normally 5 working days)
- Haste 1** (2 working days)
- Haste 2** (3 working days)

Haste must be agreed upon in advance at +47 70 11 69 00 / post@patogen.no.  
 Haste 1 entails a 200% additional cost.  
 Haste 2 entails a 100% additional cost.

**DELIVERY BACTERIOLOGY**

The delivery time for bacteriology will depend on how long the bacterial growth takes.

When using swabs, for quality reasons, the samples must be sent the same day by overnight express.

**HISTOLOGY**

<b>No. of fish*</b>	..... Fry ..... Fresh water ..... Salt water/broodstock ..... Cleanerfish
<b>Tissue*</b>	<input type="radio"/> Heart <input type="radio"/> Kidney <input type="radio"/> Gill <input type="radio"/> Skin <input type="radio"/> Fry <input type="radio"/> Liver <input type="radio"/> Spleen <input type="radio"/> Pylorus region Other: .....
<b>Purpose*</b>	<input type="radio"/> Routine <input type="radio"/> Increased mortality Other:.....
<b>Size*</b>	<input type="radio"/> 0-100 grams <input type="radio"/> 100 grams - 4,5 kg <input type="radio"/> > 4,5 kg
<b>Note</b>	

**BACTERIOLOGY**

<b>No. of fish*</b>		<b>Material*</b>	<input type="radio"/> Bacterial culture primary <input type="radio"/> Bacterial culture secondary
<b>Tissue*</b>	<input type="radio"/> Heart <input type="radio"/> Kidney <input type="radio"/> Gill <input type="radio"/> Skin <input type="radio"/> Fry <input type="radio"/> Liver <input type="radio"/> Spleen <input type="radio"/> Pylorus region Other: .....		
<b>Note</b>			
<b>Storage of bacteria in biobank</b>	<input type="radio"/> Yes <input type="radio"/> No	<b>Reservation against expert assessment</b>	<input type="radio"/> Yes <input type="radio"/> No
<b>Evaluation of resistance to antimicrobials</b>	<input type="radio"/> Yes <input type="radio"/> No		

**CLINICAL HISTORY**

Increased mortality?*	<input type="radio"/> Yes <input type="radio"/> No	Known diagnoses*		Disease suspicion*	
-----------------------	----------------------------------------------------	------------------	--	--------------------	--

**DISEASE DESCRIPTION\*** - (clinical signs, cause of disease, autopsy findings...)

**AUTOPSY FINDINGS PER FISH**

**Known diagnoses at the site the past 4 months:**

<input type="checkbox"/>	PD	<input type="checkbox"/>	HSMI	<input type="checkbox"/>	CMS	<input type="checkbox"/>	Gill disease	<input type="checkbox"/>	Wound infection	<input type="checkbox"/>	Other:
--------------------------	----	--------------------------	------	--------------------------	-----	--------------------------	--------------	--------------------------	-----------------	--------------------------	--------

**Detected pathogens at the site the last 4 months, without disease:**

<input type="checkbox"/>	Poxvirus	<input type="checkbox"/>	<i>Tenacibaculum maritimum</i>	<input type="checkbox"/>	IPNV	<input type="checkbox"/>	PRV
<input type="checkbox"/>	<i>Paramoeba perurans</i>	<input type="checkbox"/>	<i>Paranucleospora theridion</i>	<input type="checkbox"/>	SAV	<input type="checkbox"/>	PMCV
<input type="checkbox"/>	<i>Yersinia ruckeri</i>	<input type="checkbox"/>	<i>Candidatus Branchiomonas cysticola</i>	<input type="checkbox"/>		<input type="checkbox"/>	



**ATTENTION! All biochemical samples must be sent directly to Ålesund.**

**DELIVERY BIOCHEMISTRY**

**Delivery time 5 working days.**

It is recommended to submit a minimum of 200 µl.  
 Submission of serum/plasma should be agreed before shipment.  
 Contact us at +47 70 11 69 00 / post@patogen.no.  
 Sampling guides are available at www.patogen.no.

**SERVICES**

BIOCHEMISTRY (CK, CK-MB, AST, LDH, ALT, Amylase, Lipase)

<b>Number*</b>		<b>Sample material*</b>	<input type="radio"/> Serum	<input type="radio"/> Plasma
<b>Purpose*</b>	<input type="radio"/> Routine <input type="radio"/> Increased mortality Other: .....			
<b>Note</b>				
<b>Size*</b>	<input type="radio"/> 0-100 grams <input type="radio"/> 100 grams - 4,5 kg <input type="radio"/> > 4,5 kg			

**Known diagnoses at the site the past 4 months:**

<input type="checkbox"/> PD	<input type="checkbox"/> HSMI	<input type="checkbox"/> CMS	<input type="checkbox"/> Gill disease	<input type="checkbox"/> Wound infection	<input type="checkbox"/> Other:
-----------------------------	-------------------------------	------------------------------	---------------------------------------	------------------------------------------	---------------------------------

**Detected pathogens at the site the last 4 months, without disease:**

<input type="checkbox"/> Poxvirus	<input type="checkbox"/> <i>Tenacibaculum maritimum</i>	<input type="checkbox"/> IPNV	<input type="checkbox"/> PRV
<input type="checkbox"/> <i>Paramoeba perurans</i>	<input type="checkbox"/> <i>Paranucleospora theridion</i>	<input type="checkbox"/> SAV	<input type="checkbox"/> PMCV
<input type="checkbox"/> <i>Yersinia ruckeri</i>	<input type="checkbox"/> <i>Candidatus Branchiomonas cysticola</i>		

**SAMPLE DETAILS**

H=Healthy, M=Moribund, D=Dead

Tube ID	Fish no.	Pen/tube/ cylinder	Clinical signs *		Note
			H	M	
1					
2					
3					
4					
5					
6					
7					
8					
9					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					
23					
24					
25					
26					
27					
28					
29					
30					
31					
32					
33					
34					
35					
36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47					
48					

This page should only be filled when ordering BIOCHEMISTRY



### SAMPLE DETAILS

H=Healthy, M=Moribund, D=Dead

Tube ID	Fish no.	Pen/tube/ cylinder	Clinical signs*		Note
			H	M	
49					
50					
51					
52					
53					
54					
55					
56					
57					
58					
59					
60					
61					
62					
63					
64					
65					
66					
67					
68					
69					
70					
71					
72					
73					
74					
75					
76					
77					
78					
79					
80					
81					
82					
83					
84					
85					
86					
87					
88					
89					
90					
91					
92					
93					
94					
95					
96					

### DELIVERY LICEADVISOR

- Normal** (3 working days)
- Haste 1** (1 working day)
- Haste 2** (2 working days)

Haste 1 must be agreed upon in advance. Haste 2 agreed in advance will be prioritized.  
Haste 1 requires delivery of samples before 09.00 and entails a 100 % additional cost.  
Haste 2 requires delivery of samples before 12.00 and entails a 50 % additional cost.

**LiceAdvisor is validated for a minimum of 30 salmon lice. Sample submission of 30 salmon lice is recommended to obtain a representative sample set.**

Are there reduced sensitivity to one or more therapeutic agents?  Yes  No

If yes, which?

<input type="checkbox"/>	SALMOSAN®	<input type="checkbox"/>	ALPHA MAX®
<input type="checkbox"/>	BETAMAX®	<input type="checkbox"/>	HYDROGEN PEROXIDE

### Analyses

<input type="checkbox"/>	PYRETHROIDS (ALPHA MAX®/BETAMAX®) <sup>1</sup>	<input type="checkbox"/>	AZAMETIPHOS (SALMOSAN®/AZASURE) <sup>2</sup>	<input type="checkbox"/>	HYDROGEN PEROXIDE <sup>3</sup>
--------------------------	------------------------------------------------	--------------------------	----------------------------------------------	--------------------------	--------------------------------

<sup>1</sup>Patent EP3030673 og EP3030674

<sup>2</sup>Patent EP3033433

<sup>3</sup>Patent EP3164502

### ADDITIONAL INFORMATION



**Attention! All samples for sequencing must be sent directly to Aalesund.**

### DELIVERY SEQUENCING

- Normal** (5-10 working days, depending on the product)
- Haste** (3-5 working days, depending on the product)
- Customer assignment** (delivery subject to separate arrangement)

Haste must be agreed upon in advance t +47 70 11 69 00 or by email at post@patogen.no and entails an additional cost.

### ANALYSES

#### Virus sequencing

- |                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>ISAV:</b> <input type="radio"/> Phylogenetic analysis (segment 6)</p> <p><input type="radio"/> Virulence assessment (segment 6) *</p> <p><small>* HPR deleted is automatically performed upon positive detection of ISAV with PCR.</small></p> <p><b>PRV1:</b> <input type="radio"/> Genotyping (segment S1, S4, M2, L1*, L2*)</p> <p><small>* Parts of the segment</small></p> | <p><b>IPNV:</b> <input type="radio"/> Phylogenetic analysis (segment A)</p> <p><input type="radio"/> Vaccine differentiation*</p> <p><small>* E.g. ALPHAJECT micro®6</small></p> <p><b>SAV:</b> <input type="radio"/> Genotyping (SAV1-SAV6)</p> |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### Other

- Bacterial typing
- ISAV segment 6 sequence file
- ISAV segment 5 sequence file
- IPNV segment A sequence file

Other sequencing services may be offered as part of R&D activities or as commissioned projects. Please contact PatoGen at +47 70 11 69 00 / post@patogen.no.

### SAMPLE DETAILS

Sample ID/Tube ID/Fish no.	Type of material	PG-no. (registered by PatoGen)	Sample no. (registered by PatoGen)	Sequencing code (registered by PatoGen)

### ADDITIONAL INFORMATION