

# EURL TSE EQAs

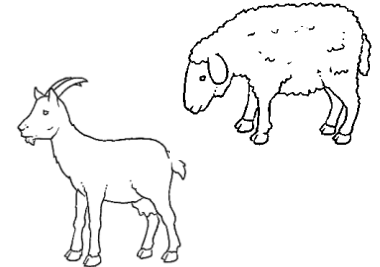
## Forthcoming 2022 rounds

19th Annual Meeting of the TSE EURL Torino, Italy - 17th-18th October 2022

### Discriminatory Western Blot in Small Ruminants **PTDS22**



PRNP Genotyping in sheep **PTGS22**  
PRNP Genotyping in goats **PTGG22**

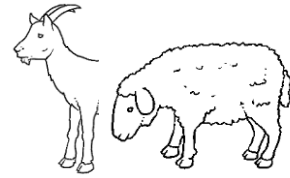


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Istituto Superiore di Sanità - Rome

Gabriele Vaccari

# Proficiency testing for Discriminatory Western Blot in Small Ruminants **PTDS22**



- All NRLs have answered to the EQA call of interest for PT in 2022

## **PTDS22 20 participants**

- All NRLs will receive an e-mail informing the imminent dispatch of samples in **7<sup>th</sup> - 11<sup>th</sup> NOVEMBER 2022** for the set of samples, that will be dispatched
- Forms for returning the results will be attached (and also supplied in the box in paper format)
  1. Cover Letter
  2. Excel files for submitting the results

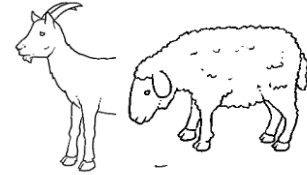


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# Proficiency testing for

## Discriminatory Western Blot in Small Ruminants **PTDS22**



Cover Letter explaining:

a) How the samples were prepared:

- » by homogenisation of brain tissue using a 50/50 mix of tissue and distilled water. Aliquots tested by Discriminatory WB
- » Inside a single container you will receive the samples.

b) Technical information for preparing the sample test

- » storage temperature (-70°C)
- » treatment of samples as tissue (not considering the water content)
- » How to work the samples (shake/vortex, collect the tissue,..)

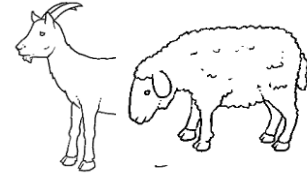


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# Proficiency testing for

## Discriminatory Western Blot in Small Ruminants **PTDS22**



### Cover Letter explaining:

#### c) Safety information:

- » “MATERIAL IS FOR “IN VITRO” USE ONLY AND MUST BE TREATED AS HAZARD GROUP 3\*\* SUBMISSION AND BE HANDLED ACCORDINGLY IN A DEROGATED CONTAINMENT LEVEL 3 LABORATORY”.

#### d) How submit the results

- » The link to upload the results to a repository folder
- » A excel file Submission PTDS22.xlsx
- » Raw data (blot images)
- » The format (\*.zip, \*.rar)

Deadline PTDS22 **9 December 2022**

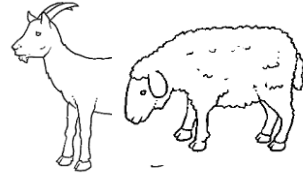


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## Proficiency testing for

### Discriminatory Western Blot in Small Ruminants **PTDS22**



- ❖ Each sample will be identified with a unique alphanumeric code (for example **DS22xx**) :

DS = Discriminatory Western Blot in Small Ruminants

22= for the year 2022

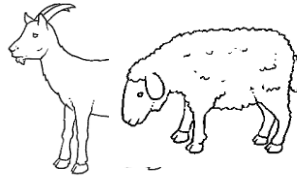
xx two digit number for each sample



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# Discriminatory Western Blot in Small Ruminants: approved methods



“TSE Strain Characterisation in small ruminants – A Technical handbook for NRL in the EU” re-edited available on the internet at

[http://www.izsto.it/images/stories/EURL\\_guidance.zip](http://www.izsto.it/images/stories/EURL_guidance.zip)



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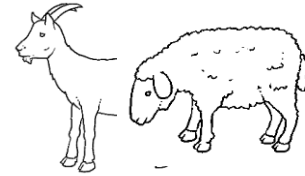
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## TSE STRAIN CHARACTERISATION IN SMALL RUMINANTS A TECHNICAL HANDBOOK FOR NATIONAL REFERENCE LABORATORIES IN THE EU

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# Proficiency testing for Discriminatory Western Blot in Small Ruminants **PTDS21**



## Submission file (excel format):

- Identification of the PT scheme
- Laboratory ID
- Test method info
- Alternative tests

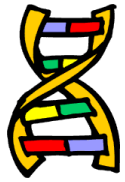
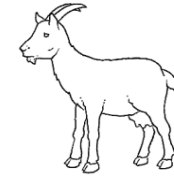
	A	B	C	D
1		<b>TSE EURL</b>		
2		Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Torino		
3		Istituto Superiore di Sanità – Roma		
4	<b>PROFICIENCY TESTING FOR VETERINARY LABORATORIES</b>			
5	<b>SCHEME:</b>		Discriminatory western blot in small ruminant	
6	<b>ID:</b>		DS21	
7	<b>DISTRIBUTION DATE:</b>		XX/12/2021	
8	Please, fill ONLY the grey cells in tables below			
9				
10				
11	Laboratory ID	Date of receipt		
12				
13				
14	<b>Test method</b>	Please insert the laboratory identification number you received for the participation to this PT		
15	<b>Sample No.</b>		Comments	
16	DS2101			
17	DS2102			
18	DS2103			
19	DS2104			
20	DS2105			
21				
22	<b>Test method used</b>	<b>Kit Manufacturer</b>	<b>Batch</b>	<b>Expiry date</b>
23				
24	<b>Antibodies used</b>	<b>Batch</b>	<b>Expiry date</b>	<b>Date of testing</b>
25				
26				
27				
28				
29	<b>1st alternative test</b>			
30	<b>Sample No.</b>	<b>Result</b>	<b>Comments</b>	
31	DS2101			
32	DS2102			
33	DS2103			



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**Proficiency testing for  
PRNP Genotyping in sheep **PTGS22**  
PRNP Genotyping in goats **PTGG22****



- All NRLs have answered to the EQA call of interest for PT in 2021

**PTGS22** 22 participants

**PTGG22** 14 participants

- All NRLs will receive an e-mail, the week before, informing the imminent dispatch of samples **24-28 October 2022**. The two set of samples will be dispatched together
- Forms for returning the results will be attached (and also supplied in the box in paper format)
  1. Two Cover Letter
  2. Two excel file for submitting the results

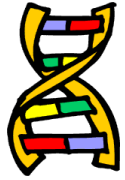
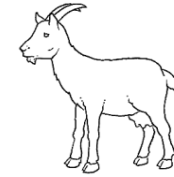
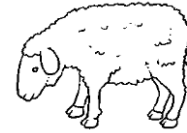


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**Proficiency testing for  
PRNP Genotyping in sheep **PTGS22**  
PRNP Genotyping in goats **PTGG22****



**Cover Letter** explaining:

- a) How the samples were prepared: blood in EDTA.
- b) Inside a single container you will receive two sachets containing the different samples. Each sachets will be identified with the identifier of the PT to which they must be submitted.
- c) Technical information for preparing the sample test storage temperature (-20°C)
- d) Test the enclosed ovine blood samples using your routine test protocol defining aminoacid present at codons 136, 141, 154 and 171 of the prion protein gene (PRNP) coding sequence. Report results in the following format: eg AFRQ/ALRR.

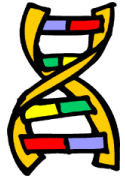
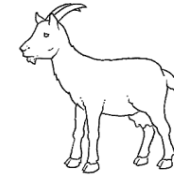
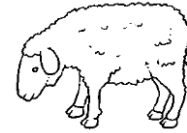
**PTGS22**



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**Proficiency testing for  
PRNP Genotyping in sheep **PTGS22**  
PRNP Genotyping in goats **PTGG22****



**Cover Letter** explaining:

- e) Test the enclosed caprine blood samples using your routine test protocol defining aminoacid present at codons 146 and 222 of the prion protein gene (PRNP) coding sequence. Report aminoacid at each codon. **PTGG22**
- f) How submit the results
- » The link to upload the results to a repository folder
  - » TWO excel file Submission PTGS22.xlsx or PTGG22.xlsx

Deadline **PTGS22 5th December 2022**

22 participants

Deadline **PTGG22 5th December 2022**

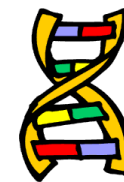
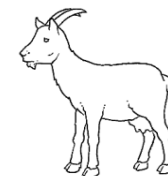
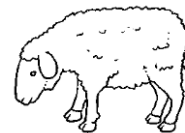
14 participants



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Proficiency testing for  
PRNP Genotyping in sheep **PTGS22**  
PRNP Genotyping in goats **PTGG22**



- ❖ Each sample will be identified with a unique alphanumerical code (for example **GS21xx** or **GG21yy**) :

GS = PRNP Genotyping in sheep

GG = PRNP Genotyping in goats

21= for the year 2022

xx two digit number for each sample

yy two digit number for each sample

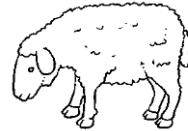
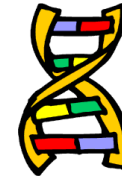


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# Proficiency testing for PRNP Genotyping in sheep PTGS22



## Submission file (excel format):

- Identification of the PT scheme
- Laboratory ID

	A	B	C
1		<b>TSE EURL</b>	
2		Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Torino	
3		Istituto Superiore di Sanità – Roma	
4	PROFICIENCY TESTING FOR VETERINARY LABORATORIES		
5	SCHEME:	PRNP sheep genotyping	
6	ID	GS21	
7	DISTRIBUTION DATE:	xx/11/2021	
8			
9	Method used		
10			
11	Please, fill ONLY the grey cells in tables below		
12	Laboratory ID	Date of receipt	Date of testing
13			
14			
15	Sample ID	Please insert the laboratory identification number you received for the participation to this PT	
16	GS2101		
17	GS2102		
18	GS2103		
19	GS2104		
20	GS2105		
21	GS2106		
22	GS2107		
23	GS2108		
24	GS2109		
25	GS2110		
26			

The “Laboratory identification number” is the identification code of each lab, received via e-mail in 2019.

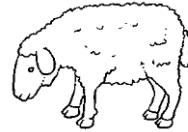
→ Note that a different code has been assigned the laboratory for each different EQA



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# Proficiency testing for PRNP Genotyping in sheep **PTGS22**



## Submission file (excel format):

- Identification of the PT scheme
- Laboratory ID
- Test method info
- Results
  - Results and comments for each sample  
(drop-down menu to select the method used)

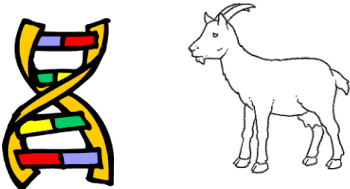
	A	B	C
1		<b>TSE EURL</b>	
2		Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Torino	
3		Istituto Superiore di Sanità – Roma	
4		PROFICIENCY TESTING FOR VETERINARY LABORATORIES	
5	SCHEME:	PRNP sheep genotyping	
6	ID	GS21	
7	DISTRIBUTION DATE:	xx/11/2021	
8			
9	Method used		
10			
11	<b>Please, fill ONLY the grey cells in tables below</b>		
12	Laboratory ID	Date of receipt	Date of testing
13			
14			
15	Sample ID	Genotype	Comments
16	GS2101		
17	GS2102	ALRR/ALRR	
18	GS2103	ALRR/ALRQ	
19	GS2104	ALRR/ALRH	
20	GS2105	ALRR/ALHQ	
21	GS2106	ALRR/AFRQ	
22	GS2107	ALRR/VLRQ	
23	GS2108	ALRQ/ALRQ	
24	GS2109	ALRQ/ALRH	
25	GS2110		
26			



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# Proficiency testing for PRNP Genotyping in goat PTGG22



## Submission file (excel format):

- Identification of the PT scheme
- Laboratory ID



A	B	C	D
		TSE EURL Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Torino Istituto Superiore di Sanità – Roma	
		PROFICIENCY TESTING FOR VETERINARY LABRATORIES	
SCHEME:		PRNP goat genotyping	
ID		GG21	
DISTRIBUTION DATE:		xx/11/2021	
Method used			
Please, fill ONLY the grey cells in tables below			
Laboratory ID	Date of receipt	Date of testing	
Sample ID	Codon 146 Genotype	Codon 222 Genotype	Comments
GG2115			
GG2116			
GG2117			
GG2118			
GG2119			

The “Laboratory identification number” will be delivered this year

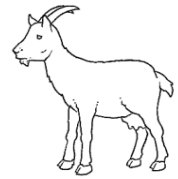


→ Note that a different code has been assigned thre laboratory for each different EQA





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# Proficiency testing for PRNP Genotyping in goat PTGG22



## Submission file (excel format):

- Identification of the PT scheme
- Laboratory ID
- Test method info: 

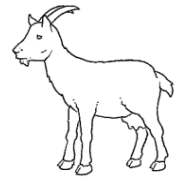
	A	B	C	
1		TSE EURL		
2		Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Torino		
3		Istituto Superiore di Sanità – Roma		
4		PROFICIENCY TESTING FOR VETERINARY LABRATORIES		
5	SCHEME:	PRNP sheep genotyping		
6	ID	GS21		
7	DISTRIBUTION DATE:	xx/11/2021		
8				
9	Method used			
10				
11	<b>Please, fill ONLY the grey cells in tables below</b>			Please indicate the title, identification code and details of the method used.
12	Laboratory ID	Date of receipt	Date of testing	
13				
14				
15	Sample ID	Genotype	Comments	
16	GS2101			
17	GS2102			
18	GS2103			
19	GS2104			
20	GS2105			
21	GS2106			
22	GS2107			
23	GS2108			
24	GS2109			
25	GS2110			
26				



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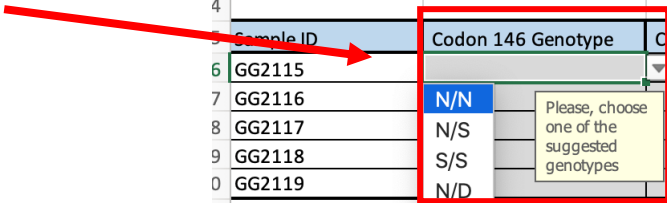
# Proficiency testing for PRNP Genotyping in goat PTGG22



## Submission file (excel format):

- Identification of the PT scheme
- Laboratory ID
- Test method info
- Results
  - Results and comments for each sample  
(drop-down menu to select the result)

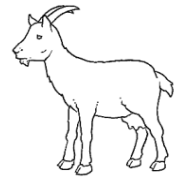
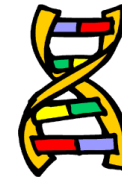
A	B	C	D
		<b>TSE EURL</b> Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Torino Istituto Superiore di Sanità – Roma	
		PROFICIENCY TESTING FOR VETERINARY LABORATORIES	
	SCHEME: ID DISTRIBUTION DATE:		PRNP goat genotyping GG21 xx/11/2021
Method used			
Please, fill ONLY the grey cells in tables below			
Laboratory ID	Date of receipt		Date of testing
Sample ID	Codon 146 Genotype	Codon 222 Genotype	Comments
GG2115			
GG2116	N/N		
GG2117	N/S		
GG2118	S/S		
GG2119	N/D		
	D/D		



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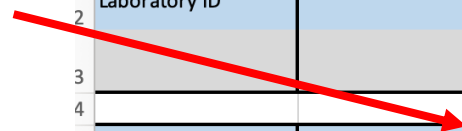
# Proficiency testing for PRNP Genotyping in goat PTGG22



## Submission file (excel format):

- Identification of the PT scheme
- Laboratory ID
- Test method info
- Results
  - Results and comments for each sample
 (drop-down menu to select the result)

A	B	C	D
		TSE EURL Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Torino Istituto Superiore di Sanità – Roma	
		PROFICIENCY TESTING FOR VETERINARY LABORATORIES	
SCHEME:		PRNP goat genotyping	
ID		GG21	
DISTRIBUTION DATE:		xx/11/2021	
Method used			
Please, fill ONLY the grey cells in tables below			
Laboratory ID	Date of receipt		Date of testing
Sample ID	Codon 146 Genotype	Codon 222 Genotype	Comments
GG2115			
GG2116		Q/Q Q/K K/K	
GG2117			
GG2118			
GG2119			



Please, choose one of the suggested genotypes



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## **EQA rounds**

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## **Technical aspect of Discriminatory Western blotting of small ruminants and BSE Classification**

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## **Technical aspect of Sheep and Goat PRNP genotyping**

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Barbara Chiappini  
Alfredo Caggiano  
Elena Esposito  
Geraldina Riccardi  
Michela Conte  
Jessica Del Bravo

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Francesco Ingravalle  
Elena Bozzetta  
Maria Mazza  
Cristiana Corci

**Thank to all participants**



TSE EURL

Istituto Zooprofilattico Sperimentale del Piemonte, Liguria e Valle d'Aosta – Turin  
Istituto Superiore di Sanità - Rome



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