



To be returned by e-mail to: DNA@icar.org

Annex II

Form for ICAR laboratory Workflow for STR Microsatellite-based Parentage Testing in Cattle

1. ADDRESS DETAILS (fill out)

Country:
Laboratory name:
Contact person:
Address:
Telephone:
E-mail:

2. BILLING INFORMATION (fill out)

Name:
Address:
VAT Number:
Contact person:
Email:

3. EDUCATION, TRAINING, AND EXPERIENCE OF SUPERVISOR /OPERATOR

a. Level of education of the head of the laboratory (tick the box and describe)

- ☐ Ph.D. in
☐ Master of Science in
☐ Bachelor of Science in
☐ Other
☐ None

b. Experience of senior operator (tick)

- ☐ More than 5 years
☐ More than 2 years but less than five years
☐ Less than 2 years



4. CERTIFICATION AND EQUIPMENT

a. Certification

(Please tick the box and send a copy of the certification with its translation into English to the ICAR Secretariat. Please note that an ISO certification is a minimum requirement!):

☐ ISO17025 certification

.....

☐ Other or no certification (No need to continue application in this case)

.....

NB. Please be aware that for ICAR certification to be granted from 2022 onwards ISO9001 will no longer meet requirements. ISO17025 accreditation will be mandatory from 2022 as per guidelines

b. Equipment services.

Please list the equipment in your laboratory.

Type of equipment	Date of purchase

5. PARTICIPATION AND PERFORMANCE IN ISAG RING TESTS

☐ No ring test participation (No need to continue application in this case)

☐ ISAG ring test participation

Year of the last participation in the ISAG ring test.....

6. PERFORMANCE IN THE LAST ISAG RING TEST.

a. Provide a copy of your ISAG certificate, when available and describe only the results obtained with the compulsory ISAG recommended microsatellites (12 microsatellites starting from ISAG 2009-10 ring test, 9 in previous ring tests);

b. Provide the following data (to clarify the meaning of “number of genotypes,” a ring test on 20 individuals analysed with 12 microsatellites produces 240 genotypes, for example):

Number of samples

Number of microsatellite markers.....

Number of correct genotypes

Number of missing genotypes.....

Number of incorrect genotypes



- c. In the most recent ISAG ring test the laboratory achieved the following result for the Typing Comparison Test:
- ☐ Absolute genotyping accuracy rank 1
 - ☐ Absolute genotyping accuracy rank 2
 - ☐ Absolute genotyping accuracy rank 3 to 5
- d. While in the previous ISAG ring test the laboratory achieved the following result for the Typing Comparison Test:
- ☐ Absolute genotyping accuracy rank 1
 - ☐ Absolute genotyping accuracy rank 2
 - ☐ Absolute genotyping accuracy rank 3 to 5

7. MARKER SET AND NOMENCLATURE

- a. Use of ISAG and other marker sets (please tick box and eventually describe)

- ☐ ISAG microsatellite marker set
- ☐ Additional microsatellite markers

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.....

- ☐ Other marker panel (e.g., SNP, please specify)

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.....
.....

- b. Nomenclature (please tick box and eventually describe)

- ☐ ISAG
- ☐ Other (please specify)

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.....
.....

- c. Microsatellite markers typed on all animals

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Number of animals typed with these markers

in 2021:

in 2022:

in 2023:

in 2024:

in 2025 (estimates):

d. Markers typed when the set of markers previously listed does not resolve parentage:

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Number of animals typed with these markers

in 2021:

in 2022:

in 2023:

in 2024:

in 2025 (estimates)

e. Power of exclusion (1 parent) for each marker used:

Number of animals and breeds used for the calculation of PE (1 parent)

.....

Method (formula and reference) used to calculate PE (1 parent)

.....

[illegible]



f. Power of exclusion (2 parent) for each marker used:

Number of animals and breeds used for the calculation of PE (2 parent)

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Method (formula and reference) used to calculate PE (1 parent)

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Marker	PE
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TOTAL