



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

Annex V

Form for ICAR laboratory accreditation for SNP-based genotyping required for Parentage Analysis in Cattle (2021 accreditation round)

SECTION 1. GENERAL INFORMATION

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 and email:

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

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 5 years
- Less than 2 years



4. CERTIFICATION, LABORATORY PROCEDURES, AND EQUIPMENT

a. Certification (tick the box, describe, and send a copy of the certification, with a copy of its English translation, to the ICAR Secretariat. Please note that no certification is required by ICAR at the moment. In case that no Certification is provided, it is possible that ICAR may inquire the applicant laboratory for details about the operations).

ISO certification

.....

Other certification

.....

No certification (**certification will be a minimum requirement in the future**)

NOTE:

1. Please be aware that from 2022 onwards, for ICAR accreditation to be granted to laboratories carrying out SNP-based genotyping, ISO17025 accreditation will be a mandatory minimum requirement as per the guidelines.
2. Please also be aware that from 2021 onwards, for ICAR accreditation of SNP-based Parentage Verification, the ICAR Parentage Analysis Accreditation for DNA Data Interpretation Centres must be requested.

For the complete instructions for applying to the ICAR accreditation, please browse the following page: <https://www.icar.org/index.php/certifications/certification-and-accreditation-of-dna-genetic-laboratories/two-new-dna-based-services/dna-data-interpretation-centres/>

a. If you have no certification, describe briefly:

Procedure for handling of samples from arrival to disposal

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Procedure for storing and retrieving information

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Procedure for control of cross-contamination

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Procedure for error and repeatability checking

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- b. Equipment services. Please provide an updated equipment services (date of revision) of the equipment used to generate the SNP genotypes if ISO17025 certification is not available.
E.g.:

1. Scanners e.g. iScan, Gene Titans
2. NGS Sequencers, e.g. HiSeq, MiSeq, IonS5 ...
3. Any other instrumentation generating genotypes

Type of equipment	Date of purchase	Date of last revision

- c. Genotyping technique (describe)

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SECTION 2. PARTICIPATION AND PERFORMANCE IN RING TESTS

5. PARTICIPATION AND PERFORMANCE IN INTERNATIONAL RING (COMPARISON) TESTS (TICK WHERE APPROPRIATE)

- ≥ 2 international ring tests
- < 2 international ring tests

Most recent international ring test (tick and describe)

- ISAG
- Other (describe number of markers, samples, participating countries)

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.....

Year of the most recent international ringtest

6. PERFORMANCE IN THE MOST RECENT INTERNATIONAL RING TEST

- Provide a copy of your ISAG certificate, and describe only the results obtained with the ISAG recommended SNPs;

Number of samples

Number of SNP markers

Number of correct genotypes

Number of missing genotypes

Number of incorrect genotypes

- 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

- 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

7. PREVIOUS INTERNATIONAL RING TEST (TICK AND DESCRIBE)

- ISAG
- Other (describe number of markers, samples, participating countries)

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Year of previous international ring test



Performance in the previous international ring test

Number of samples
Number of SNP markers
Number of correct genotypes
Number of missing genotypes
Number of incorrect genotypes

National ring tests

≥ 2 national ring tests
 < 2 national ring tests

Most recent national ring test description

Country of the ring test
Year of most recent national ring test
Number of participants

Performance in most recent national ring test

Number of samples
Number of SNP markers
Number of correct genotypes
Number of missing genotypes
Number of incorrect genotypes

Previous national ring test description

Country of the previous ring test
Year of previous ring test
Number of participants

Performance in the previous national ring test

Number of samples
Number of SNP markers
Number of correct genotypes
Number of missing genotypes
Number of incorrect genotypes

No ring test participation



8. MARKER SET AND NOMENCLATURE

- **Use of ISAG or other marker sets (please tick box and provide list of SNPs)**

- ISAG SNP marker set
- Additional SNP markers (please specify)

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.....

- **Nomenclature (please tick box and eventually describe)**

- ISAG
- Other (please specify)

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Number of animals typed with these markers
in 2017:
in 2018:
in 2019:
In 2020:
In 2021 (estimates)