

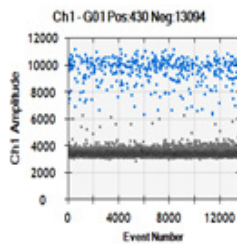
## User Manual

# Digital Duplex PCR dChiTu

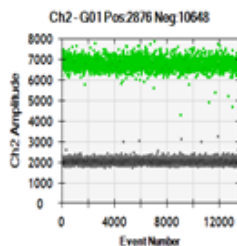
### Principle

This method describes a routine procedure for the quantitative detection of chicken and turkey DNA. Using the ratio of the concentrations of positive droplets (copies/ul) together with a conversion factor, the weight of the sample can be determined in percent by weight.

Chicken FAM



Turkey HEX



### Contents and Storage

4 tubes of primer mix, lyophilized, for 4x24 reactions. Shipped at ambient temperature, store at -20°C

**Supplied on demand:** EXCEL table for results calculation

### Reagents to be Supplied by User

QX200 ddPCR Supermix for Probes 5ml (Cat No. 186-3024) and other consumables for ddPCR with the QX200 system.

### Protocol

1. Add 153 µl PCR grade water per tube of primer-mix, vortex vigorously and incubate for 5 min at 60°C (store solution at 4°C, stable for 1 week).

2. Add 282 µl Supermix for probes (2x) and mix well.

Yields 435 µl ready-to-use Mastermix

3. Mix 17 µl ready-to-use Mastermix with 5 µl sample solution in an appropriate PCR reaction vessel. Recommended amount of DNA: 0.6 ng, measured by absorbance and/or 1:32 diluted isolated DNA.

4. Use the following thermal cycling profile:

- 10 min, 95°C
- 30 s, 95°C
- 60 s, 55°C
- Repeat steps 2 to 3 **50 times in total**
- 10 min, 98°C
- Hold, 4°C

6. Set the Probes parameter for the droplet reading.

7. Analyse the results with QuantaSoft Software. To obtain quantifiable results the Droplets/µl value for the total amount of DNA (the lowest Threshold) should be over 100 cp/µl. The value of the empty droplets should be under 100cp/µl.

### Contact

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### Further Information

<https://www.microsynth.com/food-testing-assays.html>

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