

Highlights

- Highly sensitive assay
- Measurement in native biological environment
- Quantification and detection of proteins and protein interactions



PICO assay

PICO AMC Kit

#PICO-000010

The **Protein Interaction Coupling (PICO)** technology enables the highly sensitive detection and quantification of proteins and protein interactions in their native biological environment with femtomolar sensitivity. Only a very small amount of sample (e.g. cells, supernatant, blood serum, etc.) is required for the analysis. The **PICO AMC workflow** includes the preparation, chemical crosslinking, lysis of the sample, and the incubation of lysates with the labeled antibodies. During the binding reaction the labeled antibodies specifically bind to their targets. Two labeled antibodies bound to their target are referred to as '**couplex**'. The number of complexes is detected in a subsequent step by amplification of the **PICO DNA Labels** by digital PCR (dPCR).

Before carrying out the dPCR, the sample is highly diluted, PICO Probes are added as well as the dPCR Mastermix from **QIAGEN**. The sample is then transferred into a **24-well QIAcuity Nanoplate** and processed by the **QIAcuity dPCR system**. The high dilution and the microfluidic dPCR technology ensure single molecule compartmentalization and independent amplification of each PICO DNA Label. This results in a zero background signal and prevents cross-reactions.

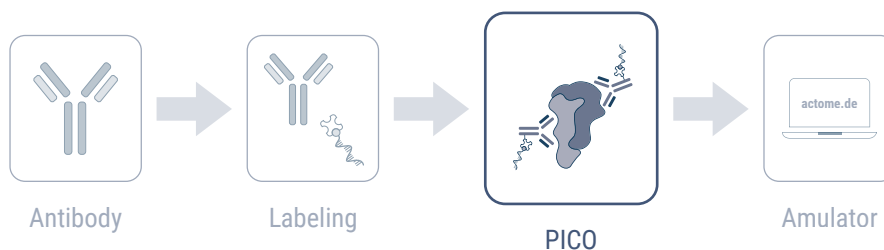
After the amplification and detection of the fluorescent signals by the QIAcuity dPCR system, the raw data is uploaded and analyzed with our web-based **Amulator** software. The software calculates the number of complexes detected in the raw data and produces publication ready charts.

Probes for dPCR:

- PICO BL Probe #PICO-000070
- PICO P8 Probe #PICO-000071

Further analysis with:

- QIAGEN QIAcuity dPCR system
- Actome Amulator



Next Generation Discovery

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