



Illumina Expression Profiling Service at ATLAS Biolabs

Service range

- **Full Service:**

1. Quality control of total RNA
2. cDNA synthesis
3. cDNA purification
4. cRNA synthesis and labelling
5. cRNA purification and quality control
6. Hybridization, washing, and scanning of appropriate Illumina Sentrix array
7. Data analysis with Illumina Bead Studio software.

- **Core Service** will comprise steps six and seven.

Sample preparation

You may send us either:

- **Total RNA (FULL SERVICE option):**

At least 500 nanograms in max. 10 µl RNase-free H₂O are needed.

- **mRNA, at least 25 nanograms in max. 10 µl RNase-free H₂O (FULL SERVICE option).**

- **Biotin-labelled cRNA, at least 2 µg in max. 10 µl RNase-free H₂O (CORE SERVICE option).**

Quality of RNA has to be documented (e.g., by gel analysis or Agilent Bioanalyzer). After receipt, we will perform an additional quality control with the Agilent Bioanalyzer to ensure RNA was not degraded during transportation. The amount of RNA will be determined spectrophotometrically.

Sending of RNA and arrays

- RNA must be sent on dry ice.
- Arrays should be sent at room temperature.

Delivery time

Depending on:

- the number of samples and the number of arrays to be hybridized
- the sample stage

As a rough estimation, the customer will receive the data 2-4 weeks after receipt of RNA at ATLAS Biolabs.



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Quality control

1. Quality and quantity of each RNA sample sent to ATLAS Biolabs (total RNA, mRNA, or cRNA) will be determined by analysis on an Agilent 2100 Bioanalyzer and by photometric analysis. If RNA samples do not fulfill the requirements for processing, a set-up fee of 25.- EUR per sample will be charged.
2. Quality and quantity of each cRNA sample synthesized at ATLAS Biolabs will be determined by analysis on an Agilent 2100 Bioanalyzer and by photometric analysis.
3. All quality assurance procedures are electronically documented and available for our customers on demand.

Results

Results are delivered on CD-ROM/DVD, including the following data:

- All original files.
- Gene expression signal values, detection of gene expression.
- On demand: Lists of differentially regulated genes.

Storage of Sentrix expression arrays and biological material

Sentrix expression arrays will be discarded immediately after finalisation of the experiment. RNA, cRNA, and hybridization mix will be stored for four weeks after finalisation of data analysis. **After this period, any biological material will be discarded *without further notification*.**

In case the customer wants ATLAS Biolabs to store biological material for a longer period, this has to be stated in writing at the time of placing the order.

Data storage

Data will be stored at ATLAS Biolabs for four weeks after CD-ROM/DVD was sent to the customer. **After this period, data will be deleted *without further notification*.**

Contact

- customer-support@atlas-biolabs.de
- microarrays@atlas-biolabs.de