

**EQUIPMENT: HIGH THROUGHPUT GENETIC ANALYSIS SYSTEM AND  
CLUSTER STATION FOR HT SEQUENCING**

**Technical data for HTS Genetic Analysis System:**

- Ability to perform sequencing reactions on 2 dual-surface enabled flowcells / slides per run in one instrument
- Time Delayed Integration (TDI) line scanning with four CCD sensors
- Sequencing technology to be based on solid-phase isothermal amplification of sequencing templates on solid surface (no emulsion PCR)
- Sequencing chemistry to be based on sequencing by synthesis
- Use of fluorescently labeled bases with reversible terminators
- Incorporation of single base per sequencing template per sequencing cycle
- Ability to perform paired end runs with reads of at least 2 x 100 nt
- Daily output of up to 25Gb of filtered bases per day (2x100nt runs)
- Throughput of 100 Gb of sequence data per flowcell/slide per run
- 8-channels self-contained flowcell/slide that can generate up to one billion paired-read tags per run

**Technical data for Cluster station for HT sequencing:**

- No dedicated clean room or additional equipment required
- Ability to perform cluster generation on single-surface and on dual-surface enabled flowcells / slides
- Automated process of cluster generation (minutes of hands-on time)
- Amplification should be completed within 4 hours
- Ability to generate > 500.000 clusters/mm<sup>2</sup> (post-filtering)
- Indexing shouldn't increase processing time

TOTAL QUANTITY

1

