

Affymetrix SNP Genotyping Service

General Information

Affymetrix Inc. pioneered the field of oligonucleotide microarrays and has been the microarray “gold standard” for fifteen years now. Affymetrix’ GeneChip™ technology applies a combination of photolithography and combinatorial chemistry to directly synthesise oligonucleotides on a glass surface. Up to 6.5 million different oligonucleotides are synthesised on a 1.7 cm² surface – an area as small as a thumbnail. Affymetrix was also among the first companies in the field to launch human whole-genome SNP genotyping chips. In addition, whole-genome SNP genotyping chips are available for various model organisms including mouse.

Advantages of Affymetrix’ genotyping technology are speed (up to 900,000 SNPs are simultaneously determined), the low amount of genomic DNA needed (200 - 500 ng), high call rates >99%, and high accuracy.

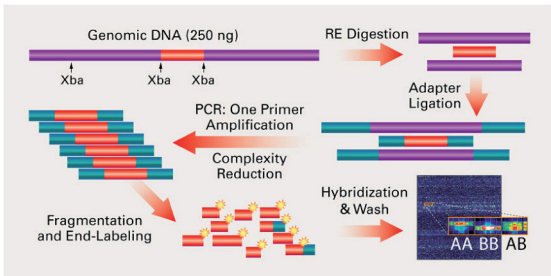
Why Choose ATLAS Biolabs’ Services?

- ATLAS Biolabs is an Authorised Affymetrix Service Provider
- ATLAS Biolabs is certified according to the international standard DIN EN ISO 9001:2008
- ATLAS Biolabs’ personnel have successfully analysed tens of thousands of microarrays since 2001
- Our service is fast (processing of up to 100 samples per day) and extremely reliable
- We offer professional assistance for both planning experiments as well as further data analysis and interpretation

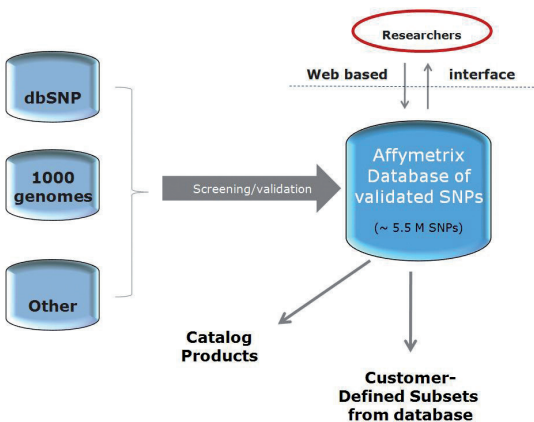
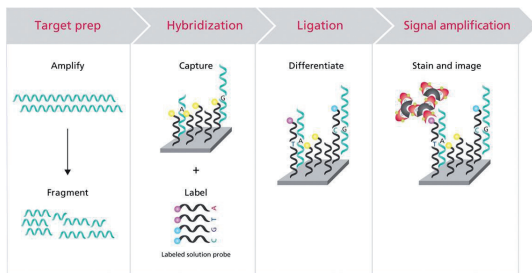


Human SNP Genotyping Service Portfolio

Single cartridge format				96well plate format
10K 2.0	SNP5.0	SNP6.0	DMET Plus	Axiom genotyping solution
10K SNPs	500K SNPs + 420K CNV markers	900K SNPs + 950K CNV markers	Content derived from Pharma ADME core panel 1,936 drug metabolism markers in 225 genes	560K SNPs + 6,000 polymorphic regions Flexible content including data from the “1000 Genomes Project”



Schematic of the Axiom Assay



Applications

	10K 2.0	SNP5.0	SNP6.0	DMET Plus	Axiom
Linkage analysis	x				
LOH analysis		x	x		x
GWAS		x	x		x
Copy number analysis		x	x		
(Pre)clinical studies				x	

LOH = loss of heterozygosity
GWAS = genome-wide association study

Service Range

- Our Full Service covers the complete process from quality control of genomic DNA to determination of genotypes
- Additional data analysis options like linkage analyses are available in close cooperation with experts in the field

Quality control

ATLAS Biolabs is certified according to the international standard DIN EN ISO 9001:2008. Our processes are subject to rigorous quality control at all steps:

- Quality and quantity control of genomic DNA by agarose gel analysis
- Negative control in each sample processing batch to exclude DNA contamination
- Positive control in each sample processing batch to ensure a technically correct laboratory process
- All quality assurance procedures are electronically documented and available for our customers on demand

Data Delivery

- 3-4 weeks for less than 100 samples. For more than 100 samples, please inquire
- DVD/external HDD sent to customer including all original data (except from the dat file), as well as the results of genotyping in XLS or TXT format