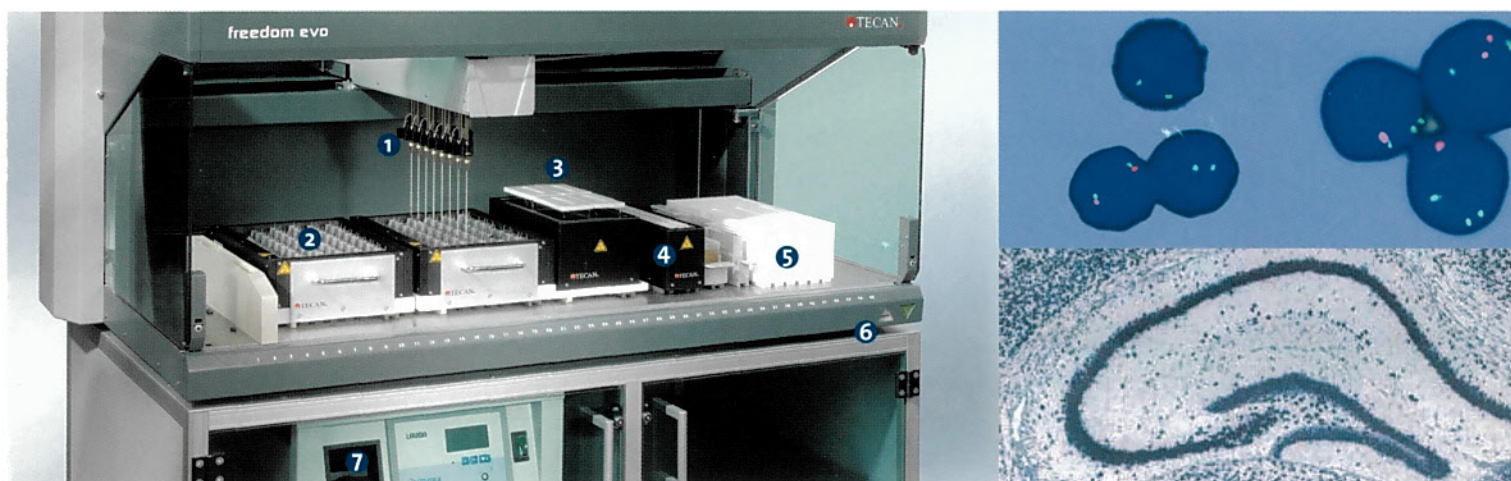


Freedom EVO | GenePaint

Automated solution for multiple, parallel ISH, FISH, or IHC analysis



Automated *in situ* hybridization

One of the key steps in the study of gene expression is the validation of results obtained by *in vitro* gene expression methods (microarrays, blots, etc.). This validation typically involves the use of appropriate cell or tissue samples and the performance of *in situ* hybridization (ISH) to confirm the *in vitro* results. The unique advantage of *in situ* hybridization over destructive expression techniques such as microarrays is the localization of transcripts in intact cells and tissues, giving a much higher level of information. However, processing of large numbers of cell or tissue samples in these type of procedures is an extremely time consuming and laborious process. To alleviate this problem, Tecan offers the GenePaint system based on a new flow-through technology for the automation of all steps required for performing *in situ* hybridization on cells or tissues on microscope slide formats.

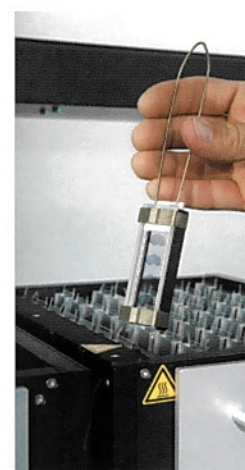
Advanced features for functional genomic studies

- eliminates 80% of the manual steps of conventional ISH, FISH or IHC analysis
- extends walk-away time through unattended hybridization protocols

- allows the use of any commercial set of reagents for hybridization studies
- assures consistent and reproducible results of excellent quality
- saves on the amounts of reagents used

The photograph above shows GenePaint configured on the Freedom EVO platform

- 1 Freedom EVO liquid handling arm with 8 pipetting tips for simultaneous liquid dispensing
- 2 GenePaint chamber rack for parallel processing of 48 slides
- 3 Temperature-controlled reagent carrier for warming up washing and buffer solutions
- 4 Temperature-controlled reagent carrier for warming up probes in Eppendorf tubes
- 5 High capacity liquid reservoir for washing and buffer solutions
- 6 Pause / resume button allows operation to be easily paused and resumed
- 7 Integrated thermal recirculator allowing high-performance temperature control of chamber racks



Easy assembly of flow-through chambers in the chamber rack.

Examples of gene expression patterns of mouse tissues processed by GenePaint are listed on www.genepaint.org