

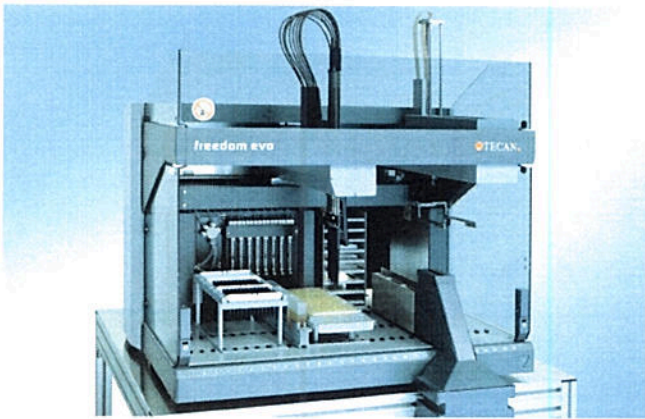
Tecan Automation Guide

Freedom EVO® & Fluent®



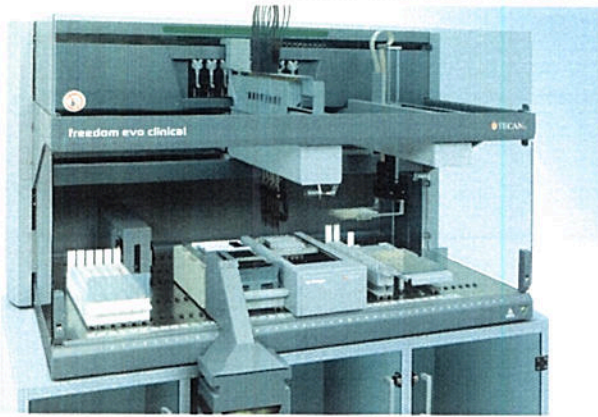
그린메이트
바이오텍

Freedom EVO® & Fluent®



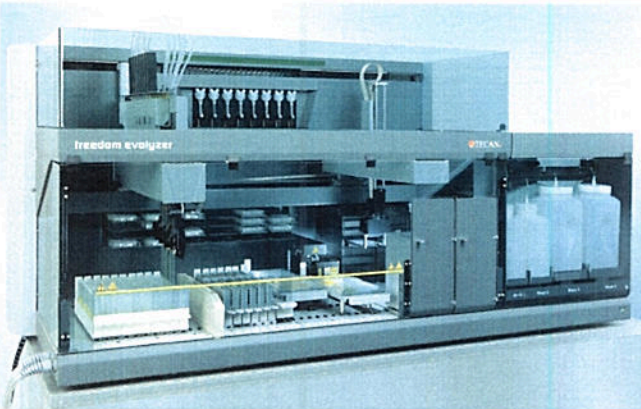
자동분주 시스템

- Pipette channel : 1/2/8 Channel
- Liquid Level Detection (LLD)
- Gripper option
- 96well-384well 분주
- PCR set up & Liquid transfer :
MTP to MTP / Tube to MTP / Tube to Tube)



핵산추출 자동화 시스템

- Pipette channel : 2/4/8 Channel
- MBS/SPE 방식 적용가능
- 48-96 Samples prep
- 96 Deepwell & 1.5ml tube 사용
- Extraction kit ⇒ Open system
- Sample Normalization



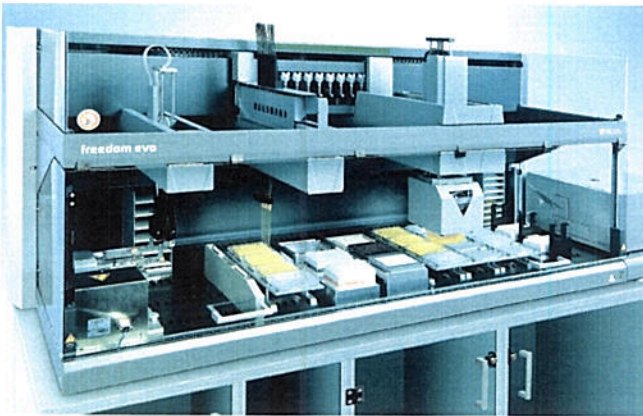
ELISA 자동화 시스템

- Pipette channel : 2/4/8 Channel
- Liquid Level Detection (LLD)
- RoMa Gripper
- Washable tip 사용⇒소모품 절약
- ELISA kit ⇒ Open system
- Washer / Reader 장착



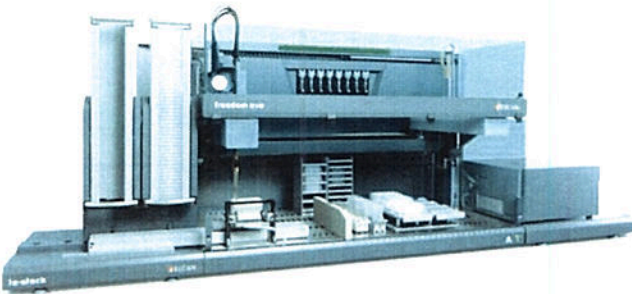
Luminex 자동화 시스템

- Pipetting channel : 2/4/8 Channel
- Luminex integration
- Luminex software 연동
- Magentic bead separation option
- Microplate washer integration



High Throughput Screening(HTS) 시스템

- Pipette channel : 8 Channel
96well-384well Multi Channel
- High capacity plate stacker or Carousel
- Multi-tasking (3 robot arm)
- MCA gripper option



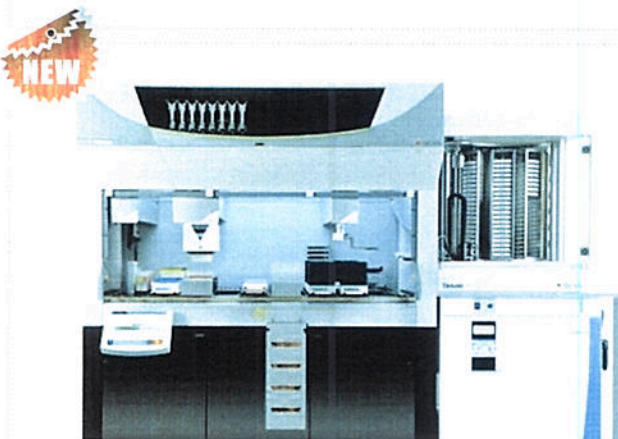
Protein Purification 자동화 시스템

- Pipetting channel : 4/8 Channel
- Atoll & GE column 사용
- Microplate reader integration
- Time & Flow rate 조절
- Buffer Creation Wizard



positive pressure SPE 자동화 시스템

- Pipette channel : 8 Channel
- Syringe : 5ml syringe
- 사용 가능한 SPE cartridge : 1, 3, 6ml
- Loading capacity : 32~144 Cartridges
- Running time : 384 samples for 8h
- TouchTool option



Cell Based Assay 자동화 시스템

- Pipetting channel : 8 Channel
96well-384well Multi Channel
- Dynamic Deck system
- UV lamp & HEPA hood option
- Gripper option
- Touch screen interface

Freedom EVO®

Freedom EVO® Platform

System Size & Capacity

Freedom EVO75



Arm configuration
Max - 2 arms

Freedom EVO100



Arm configuration
Max - 2 arms

Freedom EVO150



Arm configuration
Max - 3 arms

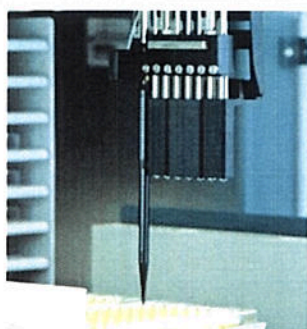
Freedom EVO200



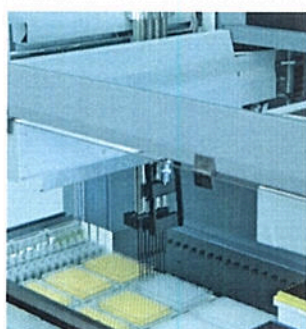
Arm configuration
Max - 3 arms

System Performance & Flexibility

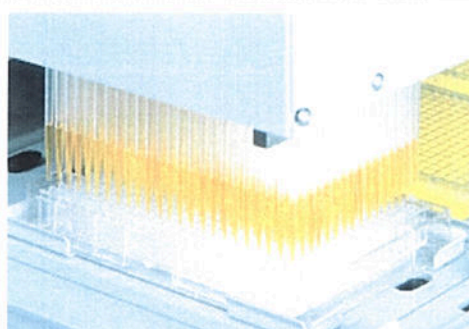
Pipetting Arm Option



Freedom EVO 8+1 Pipetting Arm
(Freedom EVO75)

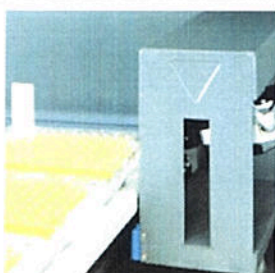


Air Displacement Pipetting Arm
(Freedom EVO100-200)

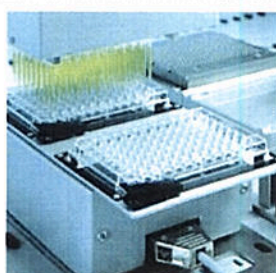


96 & 384 Multi-Channel Arm
(Freedom EVO100-200)

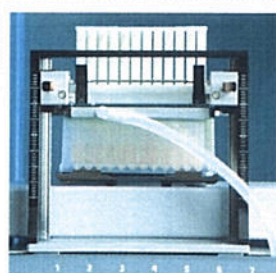
Accessories



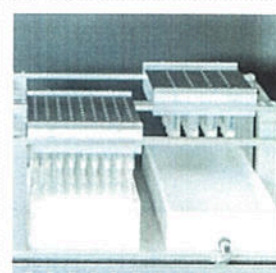
Pos-ID Barcode reader



Te-Shake Plate shaker
(Optional heating module)

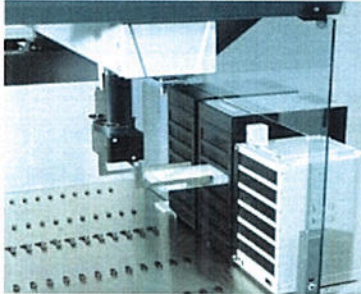


Te-Chrom Protein
purification module

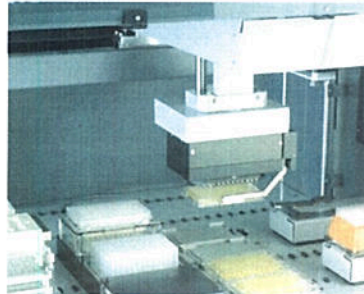


Positive Pressure SPE

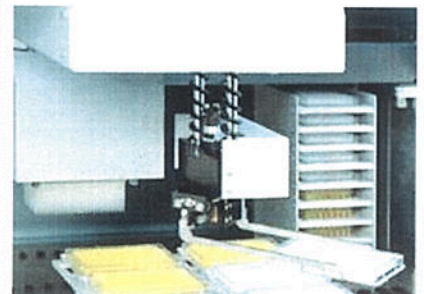
Gripper Arm



Standard Gripper
360° 회전가능
장비의 전, 후/좌, 우 access 가능



MCA96 Gripper
MCA Arm에 Optional gripper를
장착하여 Plate 등 이동 가능



MCA384 Gripper
Y, Z축이 MCA384 Arm과 독립적으로 이동 가능

Storage Option

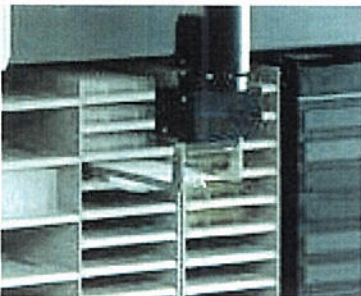
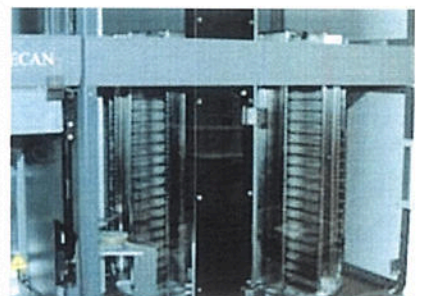


Plate Hotel
Microplate 9장
Deepwell plate 4장



Te-Stack
Microplate 88장
Deepwell plate 28장
Nested tip 저장가능



Carousel LPT 200 EVO
Microplate 220장
Deepwell plate 70장
Tip rack 저장가능

Freedom EVO® Specifications

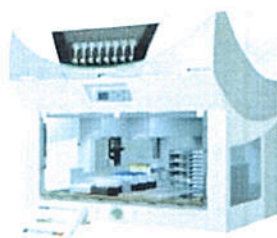
Pipetting Precision

| Pipetting volume | 0.5ul | 1ul | 10ul | 50ul | 100ul |
|------------------|-------|-------|-------|-------|-------|
| Precision [%CV] | < 6.0 | < 4.0 | < 1.0 | < 0.4 | < 0.4 |

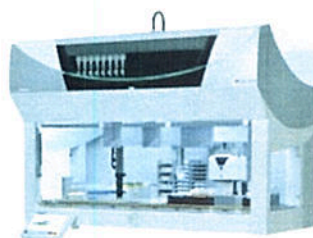
Multi Channel Arm Pipetting Precision

| Pipetting volume | 1ul | 2ul | 5ul | 10ul | > 10ul |
|------------------|-------|-------|-------|-------|--------|
| Precision [%CV] | < 6.0 | < 6.0 | < 4.0 | < 3.0 | < 3.0 |

Fluent® Platform



FLUENT
480



FLUENT
780



FLUENT
1080

Plate positions : 30

Plate positions : 48

Plate positions : 72



Flexible Channel Arm



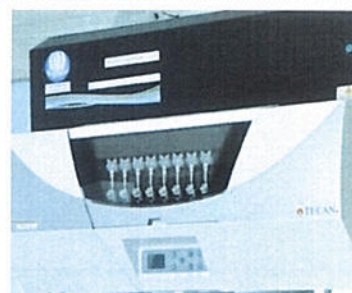
Adaptive Signal Technology
최소 2ul sample & reagent
detection 가능

Multi-Channel Arm



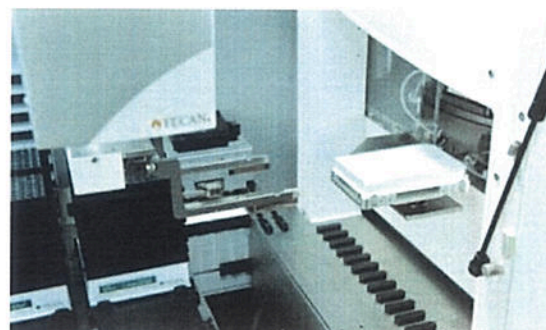
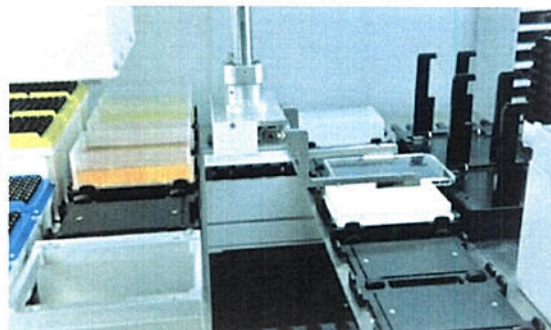
96 & 384 head 자동 교체방식
Volume range : 96head (1ul-500ul)
384head (0.5ul-125ul)

HEPA & UV



Optional integrated HEPA & UV
HEPA & UV 장착 - Contamination 방지
UV resistant panel - UV로부터 보호

Fluent® Gripper Arm



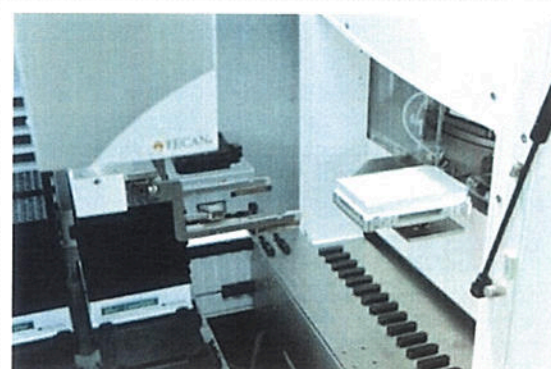
Fluent Gripper Arm
빠르고 정확하고 조용한 움직임.
전 방향으로 접근 가능.

Fluent® Worktable



Dynamic Deck™
Flexible한 worktable 구성.
Optimal Capacity & High Throughput

Fluent® Carousel



Storage system
Microplate 210장,
1536well plate 250장 저장 가능

Fluent® specifications

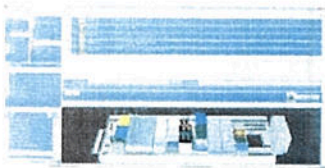
| | 8 Channel Flexible Arm | | 96 Multi-Channel Arm | | 384 Multi-Channel Arm | |
|------------------|------------------------|-------|----------------------|------|-----------------------|------|
| Pipetting volume | 1ul | 100ul | 1ul | 10ul | 0.5ul | 2ul |
| Precision [%CV] | < 6.0 | < 0.3 | < 6% | < 3% | < 4% | < 3% |

SOFTWARE & INTEGRATION DEVICE

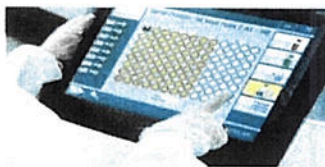
SOFTWARE



Freedom EVOware®



FluentControl™



TouchTools Suite™

Freedom EVO Software

| | |
|---------------------------|--|
| Freedom EVOware® Standard | 기본적인 장비의 Control과 Integration된 Device control |
| Freedom EVOware® Plus | 통합된 Dynamic scheduling 기능을 통해 복잡한 Assay protocol에 사용 |

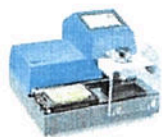
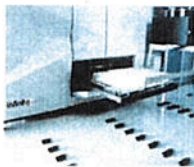
Fluent Software

| | |
|----------------|--|
| FluentControl™ | 기본적인 장비의 Control과 Integration된 Device control 및 Touch Screen |
|----------------|--|

Other Software

| | |
|----------------------------------|-------------------------------------|
| Freedom EVOware® Buffer Creation | 다양한 Condition의 Buffer 제작 |
| Freedom EVOware® Normalization | Sample의 농도 균일화 |
| Freedom EVOware® Sample Tracking | Sample의 조작 및 전반적인 이력 관리 |
| Freedom EVOware® Hit-Picking | Hit 화합물의 선택 및 2차 Screening plate 제작 |
| TouchTools Suite™ | Touch Screen을 통한 간단한 분주 조작 및 실험 설정 |

INTEGRATION DEVICE



Microplate Reader

| | |
|-------------------------------------|--|
| Multi- Functional Microplate Reader | Absorbance, Fluorescence 그리고 Luminescence 측정이 가능한 Microplate reader의 Integration. (Model : Infinite200pro, InfiniteF500, InfiniteM1000) |
| Absorbance Reader | 230nm-1000nm까지의 Absorbance측정이 가능한 Absorbance reader의 integration. (Model : InfiniteF50, Sunrise, Infinite200pro Nanoquant) |

Microplate Washer

| | |
|----------------------------------|---|
| 96well-384well Microplate Washer | 96well-384well plate를 한번에 Washing 가능하며, Magnet과 Vacuum을 이용한 Washing option지원 (Model : Hydrospeed) |
| Microplate Strip Washer | 96well전용 Plate washer로 1개 또는 2개의 Strip씩 Washing 해주며, 필요에 따라서 Strip을 선택적으로 Washing할 수 있다. Magnet과 Vacuum을 이용한 Washing 지원 (Model : Hydroflex) |