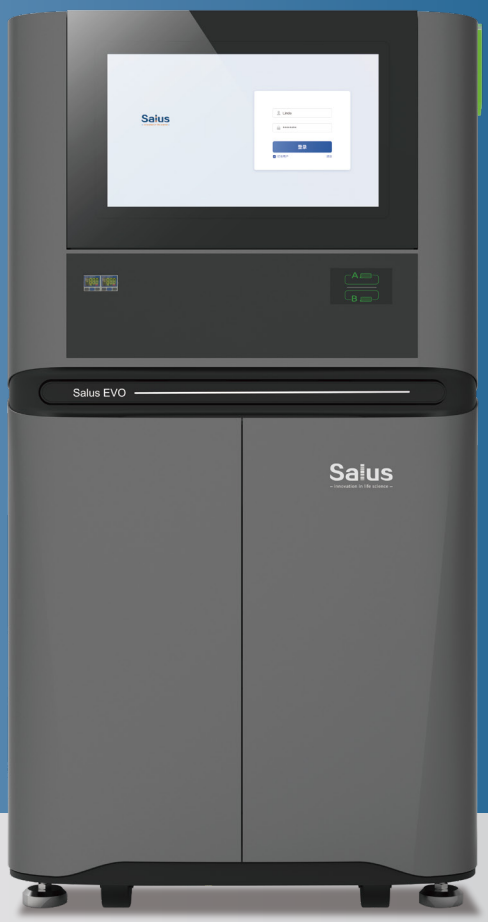
Salus
innovation in life science

Salus EVO Genetic Sequencer



Salus EVO Platform

Salus BioMed is committed to providing cutting-edge next-generation sequencing (NGS) platforms that enhances research and clinical applications. The Salus EVO sequencer, engineered for data-intensive tasks, achieves an optimal balance of speed and throughput. Its advanced optics, rapid chemistry systems, high-density chip design, and streamlined workflow ensure exceptional throughput, data quality, user experience, and cost-efficiency to meet diverse needs.

CE
CERTIFIED

CE-IVDR

V2.0

Key Features

A state-of-the-art sequencer featuring major upgrades in core technologies, specifically engineered for diverse data-intensive applications.

1500 M – 6000 M reads / run Throughput up to	Run Time	Read length
1800 Gb per run	**9.5 hr – 24 hr**	**SE 75 – PE 150**

Specifications

Sequencing Reagent Set	Lanes	Read Length	1 x Data / Run	2 x Data / Run	Time	Q30
1500 M	4	SE 75	112.5 Gb	225 Gb	9.5 hr	≥ 90%
		PE 100	300 Gb	600 Gb	15 hr	≥ 85%
		PE 150	450 Gb	900 Gb	21 hr	≥ 85%
3000 M*	4	PE 100	600 Gb	1200 Gb	17 hr	≥ 85%
		PE 150	900 Gb	1800 Gb	24 hr	≥ 85%

*The sequencing time is for dual index (8+8);

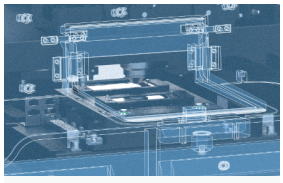
*The data output is from a single chip; Salus EVO can run two chips simultaneously;

*The time mentioned above is the theoretical sequencing time for a single chip.

Application	Recommend Reads length	1 x 1500 M (Samples / Run)	2 x 1500 M (Samples / Run)	1 x 3000 M (Samples / Run)	1500 M + 3000 M (Samples / Run)	2 x 3000 M (Samples / Run)
WES (15 Gb / Sample)	PE 150	30	60	60	90	120
Large Panel (35 Gb / Sample)	PE 150	12	24	25	37	50
WGS (100 Gb / Sample)	PE 150	4	8	9	13	18
WGBS (100 Gb / Sample)	PE 150	4	8	9	13	18
Single Cell (100 Gb / Sample)	PE 50+100	4	8	9	13	18
Spatial Transcriptome (200 Gb / Sample)	PE 100	1	2	3	4	6

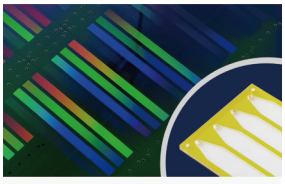
Tech Innovations

R&D capabilities



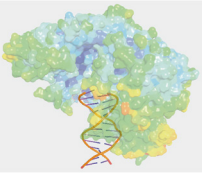
New Optical System

100% larger field of view and 50% less imaging time



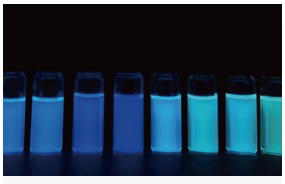
New Chips

Robustness and better reaction efficiency



New Enzymes

Read length up to PE 150 with better quality



New Fluorescent Dye

Proprietary dyes systems to optimized for better imaging performance



New Chemistry

In fast sequencing mode, the SE 75 + 8 + 8 test can be completed in as fast as 9.5 hours

Data Demonstrations

Whole Genome Sequencing WGS

Sample: NA12878 gDNA

Experiment: Salus EVO PE 150, Whole Genome Sequencing (~30X) ;

	Salus EVO_01 PE 100	Salus EVO_02 PE 150
Total_bases (G)	118.37	118.37
Q30 (%)	95.26	96.03
GC (%)	39.63	40.00
Duplication_rate (%)	3.99	3.92
Mapping_rate (%)	99.97	99.97
Mean_depth (X)	39.42	39.60
Coverage (%)	98.94	99.02

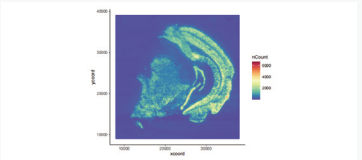
	Salus EVO_01 PE 100	Salus EVO_02 PE 150
SNP_sensitivity (%)	99.52	99.54
SNP_precision (%)	99.57	99.5
SNP_F-Score (%)	99.55	99.52
Indel_sensitivity (%)	93.33	93.39
Indel_precision (%)	96.11	96.15
Indel_F-Score (%)	94.70	94.75

Spatial Transcriptomics

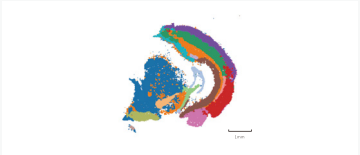
Sample: Mouse brain tissue sections

Experiment: Use the Salus STS reagent kit sets to collect cDNA for library preparation following tissue permeabilization (with ~1μm resolution), and perform PE 150 sequencing with the Salus EVO

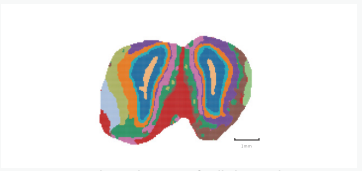
	Salus EVO
Total_reads (M)	253
Reads With Valid Barcodes (%)	74.77
Sequencing Saturation (%)	76.91
Q30 Bases in CB + UMI (%)	94.32
Q30 Bases in RNA Read (%)	88.74
Unique + Multiple Mapped to Genome (%)	92.75
Unique Mapped to Genome (%)	81.14
Unique + Multiple Mapped to Transcript (%)	59.10
Unique Mapped to Transcript (%)	59.10



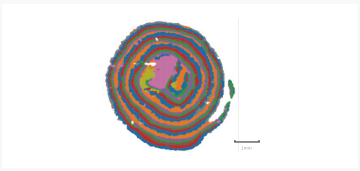
UMI density map



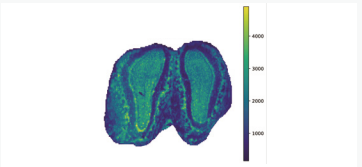
Anatomy revealed by unsupervised clustering: mouse brain



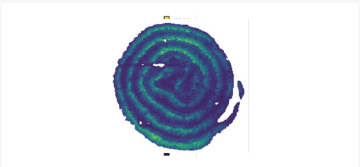
Spatial visualizat ion of cell clusters by unsupervised clustering: mouse olfactory bulb



Spatial visualization of cell clusters by unsupervised clustering: mouse intestine Swiss roll



UMI density map of mouse olfactory bulb



UMI density map of mouse intestine Swiss roll

Massive Scale of Academic and Industrial Applications



Healthcare

- Early detection
- Genetics
- NIPT
- PGT-A



Public Safety

- Disease control
- Customs
- FDA/NMPA/EMA
- Forensics



Research

- Animals
- Plants
- Biology
- Medicine



Breeding

- Agriculture
- Livestocks
- Aquaculture



Environment

- mNGS
- eDNA



Consumer

- Ancestry
- Sports
- Wellness

Salus EVO Instrument Specifications

Parameter	Specifications	
Dimensions	870 mm(W) × 995 mm(D) × 1616 mm(H)	
Weight	350 KG	
Power Requirements	Input voltage	200 V - 240 V~
	Frequency	50 / 60 Hz
	Power	1200 VA
	Fuse	T15AH250V
Instrument Configuration	Type	Capacitive
	Display	21.5 inch
	Resolution	1920 × 1080
Operating Environment	Temperature	19°C - 25°C
	Humidity	20% RH - 80% RH (No condensation)
	Altitude	≤ 2000m
Instrument Control Computer	CPU	2 x AMD7643 (Single 48 core / 96 - thread 2.3 - 3.6G / 225W)
	Storage	1 TB GB DDR4
	Memory	11 TB HDD * 3 ; 512 GB + 3.84 TB * 2 SSD
	OS	Windows 10 X64
Maximum Sound Pressure	75 dB(A)	

Sequencer Safety

The products comply with IEC6010-2010, IEC6010-2010 / AMD /:2016, IEC61010-2010: 2019, and IEC61010-2-081-2019.

Featuring a rounded shape design, Salus EVO is user-friendly for researchers and operators, significantly reducing the risk of scratching.

Crafted from flame-retardant and environmentally friendly materials, our instruments are designed for easy cleaning and sterilzation with alcohol.

FOR ORDERING AND GUIDANCE
- contact your local AH diagnostics

87 45 90 10	ahdiagnostics.dk	order@ahdiagnostics.dk
(0)8 680 0845	ahdiagnostics.se	order@ahdiagnostics.se
2323 3260	ahdiagnostics.no	order@ahdiagnostics.no
(0)10 325 3000	ahdiagnostics.fi	order@ahdiagnostics.fi

AH diagnostics