LABTRON

Amino Acid Analyzer
LAAA-A12

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Amino Acid Analyzer LAAA-A12 is an automatic unit comprised with host and post-column derivatization system, is divided into hydrolyzed protein analysis system (sodium salt) and physiological body fluid analysis system (lithium salt). Features autosampler with built-in ammonia removal system, offers loop sampling and variable sampling modes with 1 to 500 µl of injection volume, and UV detector with aberration concave diffraction grating spectroscopy and 190 to 800 nm of detection wavelength. Designed with Quaternary low-pressure gradient pump with 0.001to 10 ml/min of flow rate and built-in 4-channel online vacuum degassing machine, and chromatography workstation, has ninhydrin post-column derivatization method with RT to 150°C of temperature range and gradient heating program.

Features

- An automatic unit comprised with host and post-column derivatization system
- Divided into hydrolyzed protein analysis system (sodium salt) and physiological body fluid analysis system (lithium salt)
- Autosampler with built-in ammonia removal system and loop sampling and variable sampling modes with 1 to 500 µl of injection volume
- UV detector with aberration concave diffraction grating spectroscopy and 190 to 800 nm of detection wavelength
- Quaternary low-pressure gradient pump with 0.001to 10 ml/min of flow rate and built-in 4-channel online vacuum degassing machine
- Chromatography workstation, offers instrument control, data collection and processing
- Ninhydrin post-column derivatization method with RT to 150°C of temperature range and gradient heating program
- High-efficient and reliable unit with improved resolution and detection limit of amino acid analysis

Application

Amino Acid Analyzer is used to provide qualitative and quantitative information and analysis of the amino acid composition of a protein or peptide hydrolysate across biotechnology, life sciences, pharmaceuticals, food and beverages, clinical trials etc.

Specifications

Model	LAAA-A12	
Quaternary low-pressure gradient pump	Pulsation	<1% or 0.1 MPa
	Flow rate	0.001 to 10 ml/min
	Flow accuracy	± 0.2%
	Gradient accuracy	≤ 0.06% (ASTM)
	Max. withstand voltage	9000 Psi
	Degassing machine	Built-in four-channel online vacuum degassing machine
	Other function	Automatic cleaning of plunger rod, anti-salt precipitation
Auto sampler	Sampling method	Loop sampling and variable sampling
	Injection volume	1 to 500 µl
	Reproducibility	<1% @10 µl
	Memory effect	< 0.01%
	Sample tray	2 with 48 sample positions each, 1.5 ml sample bottle
Separation unit	Chromatographic column	Sodium ion exchange column; 4×150 mm
Derivative unit	Derivation method	Ninhydrin post-column derivatization method
	Temperature setting	Rt to 150°C
	Temperature increment	0.1°C
UV detector	Spectroscopy system	Aberration concave diffraction grating spectroscopy
	Wavelength range	190 to 800 nm
Working environment	10 to 30°C	
Relative humidity	≤ 80% RH	
Power supply	AC 220 ±10%, 50 Hz	
Power	5 kW	

01 Box dimension (W×D×H)	670×570×480 mm
02 Box dimension (W×D×H)	670×570×480 mm
03 Box dimension (W×D×H)	670×570×350 mm
04 Box dimension (W×D×H)	670×570×350 mm
05 Box dimension (W×D×H)	670×570×480 mm
01 Box gross weight	27.2 kg
02 Box gross weight	24.7 kg
03 Box gross weight	15 kg
04 Box gross weight	18.5 kg
05 Box gross weight	24.7 kg