

Z DGGE



VS20WAVE-DGGE is a complete system for DNA mutation analysis

- MAXIMUM 96-SAMPLE THROUGHPUT
- FOUR-SCREW VERTICAL CLAMPING TECHNOLOGY ACCELERATES SET UP
- LARGE FORMAT - 20x20CM GLASS PLATES FOR IMPROVED RESOLUTION
- 100ML GRADIENT MIXER, WITH VALVE-CONTROLLED 50ML RESERVOIR AND MIXING CHAMBERS, MAKES TWO 1MM PARALLEL DENATURING GRADIENT GELS
- MICROPROCESSOR-CONTROLLED TEMPERATURE CONTROL UNIT ACCURATE TO $\pm 0.02^{\circ}\text{C}$





The VS20WAVE-DGGE is a complete system for DNA mutation analysis. Using the innovative vertical screw-clamp technology of the VS20-WAVE system, the VS20WAVE-DGGE is fully equipped – with temperature control unit, stirrer, gradient mixer and casting accessories – to perform specific mutation analysis applications.

Denaturing Gradient

Innovative Casting and Set-up Mechanism

The VS20WAVE-DGGE utilises novel vertical screw clamp technology to assemble two vertical gels. This reduces the number of screws required for set up making casting assembly faster, while a built-in inner buffer chamber within the PAGE insert allows set-up to be completed without the inclusion of heavy top tanks or buffer chambers. A dual purpose PAGE insert eliminates the need for plate transfer, and is used with a cam casting base to guarantee efficient leak free casting.

Precise thermal control

The redesigned VS20DGGE-TC temperature control unit combines buffer recirculation with a heat sensor and 1.4kW heating element to facilitate precise temperature control to within $\pm 0.02^{\circ}\text{C}$, allowing the gel temperature to be set to the melting temperature (T_m) of the amplified DNA polymorphism or mutation of interest. Other benefits include: a conspicuous 4-digit 16mm LED panel to aid set-up; precise tuning to within 0.1°C resolution; an operating set point, plus three adjustable pre-set temperature values; and stirred buffer circulation for temperature stability and uniformity.

Programmable power supply option

At 500V, 800mA and 300W outputs, the optional powerPRE0500 power supply provides full flexibility for different mutation detection techniques.

TECHNICAL SPECIFICATIONS

WAVE ELECTROPHORESIS INSERT AND TANK		TEMPERATURE CONTROL UNIT	
Max. Number of Gels	2 per run	Temperature Control	PID
Plate Dimensions (W x H)	20x20cm	Operating Temperature Range	Ambient to 100°C
Active Gel Dimensions (W x H)	16 x 17.5cm	Working Temperature Range (DGGE)	$45-70^{\circ}\text{C}$
Spacer Thicknesses Buffer	0.75, 1, 1.5 and 2mm	Buffer Recirculation Mechanism	Stirring
Max. Sample Capacity	96 samples; 48 per gel	Temperature Uniformity/Stability at 37°C	$\pm 0.05/0.02^{\circ}\text{C}$
Standard Combs	2x 1mm 24-sample	Setting/Display Resolution	0.1°C
Available Combs	1, 5, 10, 18MC, 24, 36MC, 48; as per VS20WAVE and MAXI units	Safety	Fluid-level float switch; isolated; IEC 1010 /CE
Max. Buffer Volume	8.5L	Stored Temperature Values	3
Unit Dimensions (W x D x H)	40.5 x 17 x 44cm	Heater Power at 230V/110VAC	1.4/1.3kW
Weight	8kg	Electrical Power at 230V/100VAC	1.5/1.4kW
RECOMMENDED POWER SUPPLY		GRADIENT MIXER	
Voltage	500V Total	Total Volume 100ml	100ml
Current	800mA	Volume of Reservoir & Mixing Chambers	50ml
Power	300W	Internal Diameter of Outlet Port	2mm

ORDERING INFORMATION

VS20WAVE-DGGE*	Complete Denaturing Gradient Gel Electrophoresis System, 20x20cm; includes: temperature control unit, cam casting base, glass plates with 1mm bonded spacers, 2x 24-sample combs and gradient mixer – 240 VAC version		
VS20WAVE-DGGETC	Temperature Control Unit		
GM100	Gradient Mixer, 100ml		
VS20WAVE-DGGEKIT	VS20-WAVE Package; includes VS20WAVE-DGGE, CSL-STIR, MU-D01, MU-S16, powerPRO500		
CSL-STIR	Magnetic Stirrer, 19 x 19cm	CLIQS	1D image analysis with band pattern matching
MU-D01	Single Channel Peristaltic Pump	CLIQS 1D Pro	1D image analysis with band pattern matching between different gels
MU-S16	Silicon tube I.D. 1/8"; 25 ft (for peristaltic pump)		
powerPRO500	powerPRO 500 Power Supply, 500V, 800mA, 300W		* For 110V units add \$ to the order code

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