



BIOTOOLS HR AGAROSE

Description

BIOTOOLS HR agarose has been especially designed for analytical electrophoresis in demanding Molecular Biology applications. The appropriate size range of nucleic acid separation with BIOTOOLS MB agarose lies between 20 and 2,000 bp depending on the concentration of agarose and the buffer used for electrophoresis. The HR agarose from BIOTOOLS has been tested for the absence of detectable DNase and RNase activity, and the high-strength gels exhibit minimal cracking.

Hints for Agarose preparation

In an appropriate container, slowly add the agarose crystals to your buffer solution while gently swirling. This will help to eliminate clumping of the agarose.

Heat the solution in a microwave on high power for 30 sec. Heating times will vary depending on your microwave oven, size of the container, and the percentage of the agarose gel.

Swirl the agarose solution gently to re-suspend the particles.

Heat the solution another 30 sec. on high power, and swirl the agarose solution.

Place the solution back in the microwave and heat on high power until the solution just starts to boil. Use caution when handling the hot solution. Micro waved solutions may become superheated and can boil vigorously when moved. After removing the boiling solution from the microwave oven, allow to cool briefly during 2 minutes at room temperature, then gently swirl the solution to release the entrapped air.

Place the agarose solution back in the microwave, and heat on high power, let the solution boil for approximately 15 seconds. Inspect the solution for agarose crystals (They will appear as floating “lenses”). If there are particles present, repeat this step until all crystals are dissolved.

Once the agarose is completely in solution, weight the container to check the water loss by evaporation. Replenish with water as necessary.

In general it is advisable to allow any agarose to cool to 50-55°C on the lab bench prior to pouring in the prepared apparatus. This is conducive to a more uniform pore size and will prevent the warping of your gel apparatus. Before pouring the gel, gently swirl the agarose solution, to help dissipate most of the remaining bubbles.

Pour the gel into a prepared casting unit. Usually, horizontal gels should be 3-5mm thick. Immediately after pouring the gels, check to see there are no air bubbles under or between the teeth of the gel comb.

Allow the gel to completely polymerise at room temperature (about 40-50 min.) before running your samples. For further information on agarose gel electrophoresis, please contact BIOTOOLS Technical Dept.

Cat. No.	Product
20.021	BIOTOOLS HR AGAROSE – 50 g
20.022	BIOTOOLS HR AGAROSE – 100 g

	GEL %	OPTIMAL SEPARATION (bp)	RECOMMENDED BUFFER
BIOTOOLS HR AGAROSE	1%	500-2,000	TBE
	2%	250-750	TBE
	3%	125-500	TBE
	4%	20-250	TBE