

Technical Bulletin

Agarose Tablets, Low EEO, for molecular biology (200 x 500mg)

Catalogue number STS0033**Cas number 9012-36-6**

Product Description

Agarose is a polymer isolated from red algae, from the species *Gelidium* and *Garcilaria*. It is a gel precursor commonly used in molecular biology for separation of nucleic acids by gel electrophoresis. Low electroendosmosis (EEO) is the most common form of agarose use in gel electrophoresis assays.

Each agarose tablet contains 500mg of agarose that easily dissolves in solution with gentle heat, typically heated in the microwave. Each bottle contains 200 tablets, in total 100G. Contents tested to be DNase and RNase free.

Application

Low EEO, agarose tablets are qualified for use in molecular biology to separate nucleic acids, with an optimal band separation of 100bp – 23kB. It can also be used for Southern and Northern blotting for fragments >1kB. Compatible DNA or RNA recovery techniques include: electroelution, freeze and squeeze, and recovery columns.

Agarose gels are prepared by percent weigh/volume. For a 1% gel dissolve 2 tablets (1g) in 100mL. For an alternative concentration use the following equation.

$$\text{Final Volume (ml)} = \frac{0.5\text{g}}{\frac{\text{weight}}{\text{volume}} \%}$$

Table 1. Optimal agarose gel concentrations are based on fragment size %(w/v)

Size Range (base pairs)	1X TAE Buffer	1X TBE Buffer
1,000 - 23,000	0.60	0.50
800 - 10,000	0.80	0.70
400 - 8,000	1.00	0.85
300 - 7,000	1.20	1.00
200 - 4,000	1.50	1.25
100 - 3,000	2.00	1.75

Reagents and Equipment required but not provided

DirectLoad™ Horizontal Gel Electrophoresis Equipment Catalogue Number DMINI or DMIDI

Ethidium Bromide, powder Catalogue Number E1510

Ethidium Bromide, solution Catalogue Number E1385

Gel Loading Dye Catalogue Number G2526

DirectLoad™ Plus 1kb DNA Ladder Catalogue Number DPLUS

Tris EDTA Buffer, BioUltra solution Catalogue Number 93283

Tris Acetate EDTA Buffer, 10X solution Catalogue Number T9650

Tris Borate EDTA Buffer, 10X solution Catalogue Number 574795

Storage/Stability

Store at room temperature.

Preparation Instructions

For R&D use only. Not for drug, household, or other uses. Please consult the Safety Data Sheet for information regarding hazards and safe handling practices.

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