

Agar, Micropropagation Grade

Product ID: **A111**

Introduction

Description: Agar, Plant TC Micropropagation Grade from Gracilaria sp. This is a higher gel-strength tissue-culture grade agar over A296.

Product Information

Solubility	Boiling Water
Physical Form	Solid
Storage Temp.	Room Temperature
Other Notes	Plant Tissue Culture Tested
UPC / SKU	A111
CAS NUMBER	9002-18-0
Synonyms	Source: Gracilaria sp
Molecular Form	test
Hydration	test
Gelling Strength	> 900 g/cm ²



A111 Agar, Plant TC Micropropagation Grade - Gracilaria

Synonyms: Agar-Agar, Gum Agar

CAS: 9002-18-0

PROPERTIES

Form: Powder

Appearance: Off-white to Cream

Application: Gelling Agent

Solubility: Partially Soluble in Cold Water; Soluble in Boiling Water

Typical Working Concentration: 6 to 10 grams per liter

Storage Temp: Room Temperature

Other Notes: Gel Strength: ≥900 g/cm² Ash Content: <6% Plant Tissue Culture Tested

Application Notes

Agar is produced from a family of red seaweeds (Rhodophyceae) primarily from two genera, Gelidium and Gracilaria. It is a mixture of agarose and agarpectin. Product A111 is produced from Gracilaria which has lower gel strength than those from Gelidium. However, in the 1950's it was discovered that pre-treatment of the seaweed with alkali before extraction lowered the yield but gave an agar with higher gel strength.²

Agar is by far the most common gelling agent used in plant tissue culture. It is used at a wide range of concentrations from 6 g/L for a slightly firm gel to 10 g/L for a brick-like gel; however, 6-8 g/L is the more commonly used range.

PhytoTechnology Laboratories® also carries agar produced from Gelidium, Product No. A296, as well as high purity grade agar, Product No. A175.

Please Note: While PhytoTechnology Laboratories® tests each lot of this product with two or more plant cell/ tissue culture lines, it is the sole responsibility of the purchaser to determine the appropriateness of this product for the specific plants that are being cultured and applications that are being used.

References

1. Merck 13, 184
2. McHugh, D.J. (2003). A guide to the seaweed industry. FAO Fisheries Technical Paper 441, Food and Agriculture Organization of the United Nations, Rome

India Contact:



Life Technologies (India) Pvt Ltd.

306, Agarwal City Mall, opposite M2K Pitampura, Delhi-110034 (India)

Tel # +91-11-4220-8000; 4220-8111; 4220-8222 Fax# +91-11-4220-8444, Mobile# +91-98105-21400,

Toll Free # 1800-120-2434

Email - customerservice@lifetechindia.com | customerservice@atzlabs.com

ISO Certifications: [ISO 9001:2008 \(QMS\)](#) | [ISO 10002:2014](#)