

# Rice Half-MS medium

Chemicals	Stock Conc.	Addition	Final Conc.	Location
MS basal salt ( M407 )	—	1.22 g	0.5X	4°C ( c )
Ammonium nitrate ( $\text{NH}_4\text{NO}_3$ )	—	3.30 g	10.31 mM	VIII
Potassium nitrate ( $\text{KNO}_3$ )	—	3.80 g	9.40 mM	toxic (D)
Potassium phosphate monobasic ( $\text{KH}_2\text{PO}_4$ )	170 g / L	2 mL	0.63 mM	bench
MES hydrate	—	2 g	0.05% (w/v)	III
PPM™	100%	2 mL	0.05% (v/v)	4°C ( a )
KOH ※	5 M	~ 730 $\mu\text{L}$	—	VII
ddH <sub>2</sub> O	—	~ 4 L	—	—
<b>Total volume</b>		<b>4 L</b>		

Gelling agent → [Gelzan™ \( G3251, CAS no.: 71010-52-1 \)](#) : 1.5 g / L ( 0.15% ). Located between **I** and **II**.  
Generally, we make 400 mL per bottle, so weigh ( **600 ± 2** ) mg / 400 mL for each bottle.

The final pH should be around **5.7 ~ 5.8**. Autoclave under **121°C** for **20 mins**.

※ KOH is used for pH adjustment. To prepare 5 M KOH solution, dissolve 330 g of 85% KOH in 900 mL ddH<sub>2</sub>O, and then bring to 1 L.

Since KOH releases heat during dissolution, **gradually and slowly add the KOH granules into the water**.