The Liu Laboratory protocol — BG-11 & MBG-11
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BG11 media
10ml 100X BG11 concentrate
1ml 1000X Ferric Ammonium Citrate
1ml 1000X Na_2CO_3
1ml 1000X K_2HPO_4
10ml 1M TES pH 8.2
ddH_2O to 1L
After Autoclaving add 1mL 1000X Vitamins

MBG11 media
Same as BG 11 media but also add:
35g Instant Ocean (dissolve first) (this is for 3.5% IO media for type strain)
1000X Fe-EDTA

BG11 Plates
Autoclave in 500 ml of water in a flask (that is easy to pour from, cap in a way that it can be recapped easily and in a sterile way):
15g Bacto Agar
A stir bar
Autoclave separately these (in a bottle is fine, can remove stir bar):
10ml 100X BG11
1ml 1000X Ferric Ammonium Citrate
1ml 1000X Na_2CO_3
1ml 1000X K_2HPO_4
10ml 1M TES pH 8.2
3g Na thiosulfate
(0.9g glucose for 5mM glucose)
Up to 500ml water
Autoclave 30min liquid cycle, Cool media on the benchtop, agar in the 55°C water bath for 15-30 minutes. Add 1ml 10mg/ml Km for Kanamycin 10µg/ml plates and 2ml for Kan 20 plates to the media, swirl. Remove agar from bath and spray down with ethanol, wipe. Pour media into agar, stir. Pour immediately.

For MBG-11 3.5% IO
Also add to the media:
35g Instant Ocean
1ml 1000X Fe-EDTA

100X BG-11(BG11 concentrate)
For 1L:

149.6g	$NaNO_3$
7.5g	$MgSO_4 \cdot 7H_2O$
3.6g	$CaCl_2 \cdot 2H_2O$
0.60g	Citric Acid(or 0.89g Na-citrate, dehydrate)
1.12ml	0.25M Na-EDTA pH 8.0
100ml	Trace Minerals

Store at 4°C

Trace Minerals
For 1L:
2.68g H_3BO_3
1.81g $MnCl_2 \cdot 4H_2O$
0.22g $ZnSO_4 \cdot 7H_2O$
0.39g $Na_2MoO_4 \cdot 2H_2O$
0.079g $CuSO_4 \cdot 5H_2O$
0.049g $Co(NO_3)_2 \cdot 6H_2O$
Store at 4°C

1000X Ferric Ammonium Citrate
For 100ml:
600mg Ferric Ammonium Citrate
Store at 4°C shielded from light. Check for growth before use.

1000X Na_2CO_3
For 100ml:
2g Na_2CO_3
Store at 4°C

1000X K_2HPO_4
For 100ml:
3.05g K_2HPO_4
Store at 4°C

1M TES pH 8.2
For 500ml:
114.625g TES
NaOH
Adjust pH to 8.2 with NaOH pellets. Store at 4°C

1000X Fe-EDTA
For 1L:
5.2g Fe-EDTA *This is the medium iron version. **PLEASE USE THIS ONE FOR R61.**
10.4g Fe-EDTA *This is for the high iron version
Store at 4°C

0.25M Na-EDTA pH 8.0
For 1 L:
93.06g Na-EDTA
Adjust pH to 8.0. Store at 4°C