

Salines

Cancer borealis

Normal saline

Salt (FW)	Conc [mM]	g/l	g/6l	g/11l
KCl (74.56)	11.0	0.82	4.92	9.02
NaCl (58.44)	440.0	25.71	154.28	282.85
CaCl ₂ · 2H ₂ O (147.02)	13.0	1.91	11.47	21.02
MgCl ₂ · 6H ₂ O (203.31)	26.0	5.29	31.72	58.15
Trizma base (121.14)	11.2	1.36	8.14	14.92
Maleic acid (116.07)	5.1	0.59	3.55	6.51
Hepes (instead of Tris+Maleate) (283.3)	10.0	2.83	17.00	31.16

pH = 7.4 - 7.5; Osmolarity = 1030 mOsm

Salines

Cancer borealis

Mn²⁺ saline

Salt (FW)	Conc [mM]	g/l	g/2l	g/5l
KCl (74.56)	11.0	0.82	1.64	4.10
NaCl (58.44)	440.0	25.72	51.43	128.57
CaCl ₂ · 2H ₂ O (147.02)	0.1	0.015	0.029	0.073
MgCl ₂ · 6H ₂ O (203.31)	26.0	5.288	10.575	26.438
Trizma base (121.14)	11.2	1.358	2.715	6.788
Maleic acid (116.07)	5.1	0.593	1.185	2.963
MnCl ₂ · 4H ₂ O (197.9)	12.9	2.55	5.10	10.20

pH = 7.4 - 7.5; mix and dissolve completely, then pH, and ONLY THEN add the Mn²⁺!

Salines

Cancer borealis

Supplement solution (to mix 50:50 with L-15 culture medium):

Salt (FW)	Conc [mM]	g/l	g/½l	g/¼l
KCl (74.56)	16.40	1.22	0.61	0.305
NaCl (58.44)	743.66	43.46	21.73	10.865
CaCl ₂ · 2H ₂ O (147.02)	24.74	3.64	1.82	0.909
MgCl ₂ · 6H ₂ O (203.31)	50.20	10.21	5.10	2.552
Hepes (283.3)	10.0	2.83	1.42	0.708

Zero Ca²⁺ / zero Mg²⁺ dissociation solution

Salt (FW)	Conc [mM]	g/l	g/½l	g/¼l
KCl (74.56)	11.0	0.82	0.41	0.205
NaCl (58.44)	440.0	25.71	12.86	6.43
Hepes (283.3)	10.0	2.83	1.42	0.708

Salines

"Elixir" Saline

(for long-term recordings of crab or lobster STG)

For 100ml crab or lobster saline:

- 0.2g Glucose (11.11mM)
- 4.5g BSA
- 0.5g antibiotics

Salines

Panulirus interruptus / Homarus americanus

Normal saline

Salt (FW)	Conc [mM]	g/l	g/6l	g/11l
KCl (74.56)	12.8	0.95	5.73	10.50
NaCl (58.44)	479.0	27.99	167.96	307.92
CaCl ₂ · 2H ₂ O (147.02)	13.7	2.01	12.09	22.16
MgSO ₄ · 7H ₂ O(246.48)	10.0	2.46	14.79	27.11
NaSO ₄ · 10H ₂ O(322.20)	3.9	1.26	7.54	13.82
Trizma base (121.14)	11.2	1.36	8.14	14.92
Maleic acid (116.07)	5.1	0.59	3.55	6.51
Hepes (instead of Tris+Maleate) (283.3)	10.0	2.83	17.00	31.16

pH = 7.4 - 7.5; Osmolarity = 1050 mOsm

Salines

Panulirus interruptus / Homarus americanus

Mn²⁺ saline

Salt (FW)	Conc [mM]	g/l	g/2l	g/5l
KCl (74.56)	12.8	0.96	1.91	4.78
NaCl (58.44)	479.0	27.99	55.99	139.97
CaCl ₂ · 2H ₂ O (147.02)	1.3	0.19	0.38	0.95
MgSO ₄ · 7H ₂ O(246.48)	10.0	2.47	4.93	12.33
NaSO ₄ · 10H ₂ O(322.20)	3.9	1.26	2.51	6.28
Trizma base (121.14)	11.2	1.36	2.71	6.78
Maleic acid (116.07)	5.1	0.59	1.18	2.96
Hepes (instead of Tris+Maleate) (283.3)	10.0	2.83	5.67	14.17
MnCl ₂ · 4H ₂ O (197.9)	16.0	3.16	6.32	15.80

pH = 7.4 - 7.5; mix and dissolve completely, then pH, and ONLY THEN add the Mn²⁺!

Salines

Procambarus clarkii

Normal saline

Salt (FW)	Conc [mM]	g/l	g/2l	g/6l
KCl (74.56)	5.4	0.403	0.805	2.416
NaCl (58.44)	195.0	11.396	22.792	68.375
CaCl ₂ · 2H ₂ O (147.02)	13.5	1.985	3.970	11.909
MgCl ₂ · 6H ₂ O(246.48)	2.6	0.529	1.057	3.172
Trizma base (121.14)	11.2	1.357	2.713	8.141
Maleic acid (116.07)	5.1	0.592	1.184	3.552
Hepes (instead of Tris+Maleate) (283.3)	10.0	2.833	5.666	16.998

pH = 7.4 - 7.5

Salines

Procambarus clarkii

Supplement solution (to mix 50-50 with Leibovitz L15 culture medium):

Salt (FW)	Conc [mM]	g/l	g/½l	g/¼l
KCl (74.56)	4.64	0.346	0.173	0.086
NaCl (58.44)	253.10	14.791	7.396	3.698
CaCl ₂ · 2H ₂ O (147.02)	24.74	3.637	1.819	0.909
MgCl ₂ · 6H ₂ O(246.48)	4.22	0.858	0.429	0.214
Hepes (283.3)	10.0	2.833	1.417	0.709