

Product Information

Grace's Insect Media

Grace's medium was originally formulated to support the growth of cells derived from the Australian emperor gum moth, *Antheraea eucalypti*. The medium is a modification of Wyatt's medium to more closely resemble *Antheraea hemolymp*. The cell lines established by Grace using this medium were the first continuous lines developed. The basal medium, when properly supplemented, has been used to culture cells derived from a variety of insects including several species of lepidopterans as well as some dipterans. The medium is primarily used as a basal medium for the growth and maintenance of cell lines derived from lepidopterans.

	G9771	G8142
	[Powder]	[1×]
COMPONENT	g/L	g/L
Inorganic Salts		
CaCl ₂ (anhydrous)	1.0	1.0
MgCl ₂ (anhydrous)	1.068189	1.068189
MgSO ₄ (anhydrous)	1.357858	1.357858
KCl	2.24	2.24
NaHCO ₃	—	0.35
NaH ₂ PO ₄	0.876923	0.876923
Amino acids		
β-Alanine	0.2	0.2
L-Alanine	0.225	0.225
L-Arginine · HCl	0.7	0.7
L-Asparagine	0.35	0.35
L-Aspartic Acid	0.35	0.35
L-Cystine · 2HCl	0.025	0.025
L-Glutamic Acid	0.6	0.6
L-Glutamine	0.6	0.6
Glycine	0.65	0.65
L-Histidine	2.5	2.5
L-Isoleucine	0.05	0.05
L-Leucine	0.075	0.075
L-Lysine · HCl	0.625	0.625
L-Methionine	0.05	0.05
L-Phenylalanine	0.15	0.15
L-Proline	0.35	0.35
L-Serine	0.550	0.550
L-Threonine	0.175	0.175
L-Tryptophan	0.1	0.1
L-Tyrosine · 2Na	0.07202	0.7202
L-Valine	0.1	0.1

Vitamins and others		
D-Biotin	0.00001	0.00001
Choline Chloride	0.0002	0.0002
Folic Acid	0.00002	0.00002
myo-Inositol	0.00002	0.00002
Niacin	0.00002	0.00002
D-Pantothenic Acid · ½Ca	0.00002	0.00002
p-Aminobenzoic Acid	0.00002	0.00002
Pyridoxine · HCl	0.00002	0.00002
Riboflavin	0.00002	0.00002
Thiamine	0.00002	0.00002
Dextrose anhydrous	0.7	0.7
D-(-)-Fructose	0.4	0.4
Fumaric acid	0.055	0.055
α-Ketoglutaric acid	0.37	0.37
L-(-)-Malic acid	0.67	0.67
Succinic acid free acid	0.06	0.06
Sucrose	26.68	26.68
Add		
NaHCO ₃	0.35	—

References

- Grace, T.D.C., Establishment of four strains of cells from insect tissues grown *in vitro*. *Nature*, **195**, 788-789 (1962).
- Grace, T.D.C., Establishment of a line of cells from the silkworm, *Bombyx mori*. *Nature*, **216**, 613 (1967).
- Grace, T.D.C., Establishment of a line of mosquito (*Aedes aegypti*) cells grown *in vitro*. *Nature*, **211**, 366-367 (1966).

GS,BG,JG,PD,JF,ALF,MAM 07/18-1