

Product Information

Schneider's Insect Media

Many insect tissue culture media were formulated to mimic the main physico-chemical properties of the body fluid of specific insects. A cursory survey of the formulas of culture media designed for insect tissues reveals great qualitative and quantitative disparities in composition.¹ Different media designed for the same species may exhibit less similarity than two media designed for insects of different orders. Various media have been devised for the *in vitro* culture of *Drosophila* cells and tissues.^{2,3} The most extensively used are Schneider's medium and Echalié and Ohanessian's D-22 medium. *Drosophila* cells have been employed to study a variety of biological processes⁴ including genetics, endocrinology, physiology, and cell biology as well as recombinant protein expression.⁵

When supplemented with 5–20% heat-inactivated fetal bovine serum, Schneider's medium has been found to support the rapid growth of both primary and established cultures of cells derived from *Drosophila melanogaster*.^{6,7} The medium has been used for the growth and maintenance of the cell lines originally derived by Schneider⁸ from *Drosophila* embryos as well as the culture of cells from other dipteran species.⁹

	S9895	S0146
	[Powder]	[1×]
COMPONENT	g/L	g/L
Inorganic Salts		
CaCl ₂ (anhydrous)	—	0.6
MgSO ₄ (anhydrous)	1.807221	1.807221
KCl	1.6	1.6
NaHCO ₃	—	0.4
NaCl	2.1	2.1
Na ₂ HPO ₄	0.7	0.7
Amino acids		
β-Alanine	0.5	0.5
L-Arginine	0.6	0.6
L-Aspartic Acid	0.4	0.4
L-Cystine · 2HCl	0.026732	0.026732
L-Cysteine	0.06	0.06
L-Glutamic Acid	0.8	0.8
L-Glutamine	1.8	1.8
Glycine	0.25	0.25
L-Histidine	0.4	0.4
L-Isoleucine	0.15	0.15
L-Leucine	0.15	0.15
L-Lysine	1.65	1.65
L-Methionine	0.15	0.15
L-Proline	1.7	1.7
L-Serine	0.25	0.25
L-Threonine	0.35	0.35
L-Tryptophan	0.1	0.1
L-Tyrosine · 2Na · 2H ₂ O	0.07202	0.7202
L-Valine	0.3	0.3

Vitamins and others		
Fumaric acid	0.06	0.06
D(+)-Glucose	2.0	2.0
α-Ketoglutaric acid	0.35	0.35
L-(-)-Malic acid	0.6	0.6
Succinic acid	0.06	0.06
D(+)-Trehalose	2.0	2.0
Yeast Extract	2.0	2.0
Add		
CaCl ₂ (anhydrous)	0.6	—
NaHCO ₃	0.4	—

References

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6. Schneider, I., Differentiation of larval *Drosophila* eye-antennal discs *in vitro*. J. Exp. Zool., **156**, 91-104 (1964).
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