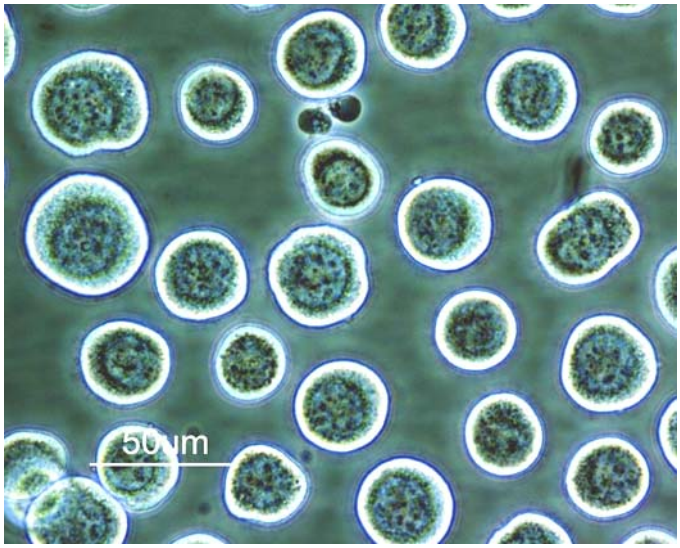
Cell line designation: IPLB-LdFB

Tissue source: *Lymantria dispar* fourth and fifth instar larval fat body

Date initiated: April 25, 1985

Morphology: Round, vacuolated cells which grow in suspension.

Culture medium: Modified TC100 (=BML-TC/10, Gardiner and Stockdale, J. Invertebr. Pathol. 25: 363-370, 1975, modified as follows):



Complete Medium

TC100	100 ml
Fetal Bovine Serum	10 ml
stock "P"	5.0 ml
vitamin stock	0.2 ml
trace minerals	0.1 ml
iron soln.	0.067 ml
Glycerol (50% in water)	0.32 ml
Glutamine (2 g/l)	2.0 ml

(see reverse for stock solutions)

TC100 is available from:

GIBCO (TC-100 Insect Medium, powder, cat. # 11600-061)
SIGMA (TC-100 Insect Medium, cat # T 0907 [powder] or T3160 [liquid])
JRH Biosciences (TC 100 Insect Medium, cat. # 56-941-101 [powder])

Cells will also grow in modified IPL-52B (also with 5 ml/100 stock "P") and have been adapted to Ex-Cell420.

Subculture procedure: Maintain cells at 26^{o}C. Cells are suspended by repeated flushing with media from a pipet. At one week intervals, 0.2 ml of old culture is added to 4 ml fresh media in a 25 cm^2 tissue culture flask.

Virus susceptibility: Cells are susceptible (with complete occlusion body formation) to *L. dispar* NPV, *Orgyia pseudotsugata* NPV and *Amsacta moorei* entomopox virus. No polyhedra were formed in response to *Autographa californica* NPV or *Heliothis zea* NPV.

Comments: Cellular vacuoles stain intensely with Oil red O and Nile Red, indicating large amounts of lipids. Isozyme patterns are similar to fat body directly from larvae.

Reference: Lynn, D. E., E. M. Dougherty, J. T. McClintock and M. Loeb. Development of cell lines from various tissues of Lepidoptera. *In* **Invertebrate and Fish Tissue Culture**. Y. Kuroda, E. Kurstak, and K. Maramorosch (eds.) Japan Scientific Societies Press, Tokyo/Springer-Verlag, Berlin, 1988.

MEDIA STOCK SOLUTIONS

Stock "P"

HyPep Dev 4601 (Quest International)	5 g
Primatone RL (Sheffield Products)	5 g
TC grade water	100 ml

Autoclave, store 4°C

Iron Soln.

FeSO4.7H2O	0.0823 g
Aspartic acid	0.0532 g
TC grade water	100 ml

Filter 0.2 um, store 4°C

Vitamin Stock

Thiamine-HCl	4.8 mg
Riboflavin	4.8 mg
Calcium Pantothenate	4.8 mg
Pyridoxine HCl	12. mg
Para-amino benzoic acid	9.6 mg
Niacin	4.8 mg
Biotin	4.8 mg
TC Grade water	60 ml

Filter 0.2 um, store 4°C

Trace Minerals

ZnCl2	4.0 mg
MnCl2.4H2O	2.0 mg
CuCl2.2H2O	19.5 mg
(NH4) Mo7O24.4H2O	4.0 mg
CoCl2.6H2O	5.0 mg
TC Grade Water	100 ml

Filter 0.2 um, store 4°C