

**Cell line designation:** IAL-TND1

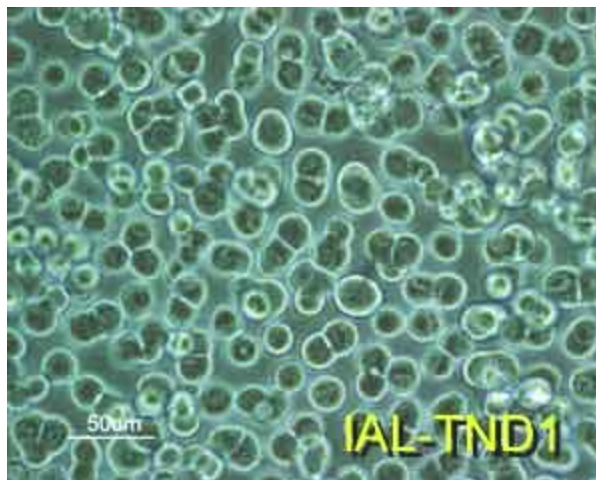
**Tissue source:** *Trichoplusia ni* imaginal wing discs

**Date initiated:** November 5, 1979

**Morphology:** Originally cells grew as epithelial cells in vesicles, currently are available only as multicellular aggregates (although see Lynn et al., *In Vitro Cell. Dev. Biol.* 21:277-281 (1985))

**Karyology:** near diploid at low passage

**Culture medium:** Ex-Cell 420 with 5% (v/v) heat inactivated fetal bovine serum (available from JRH Biosciences, Lenexa, KS)



Alternatively, modified TNM-FH which contains:

- 100 ml Grace's (available from GIBCO, JRH Biosciences, SIGMA & other companies)
- 0.3 g T. C. Yeastolate
- 0.3 g Lactalbumin hydrolysate
- 10 ml Fetal bovine serum

pH should be about 6.2 and osmolarity 350 mOsm/kg.

TNM-FH is available from:

GIBCO (Grace's Insect Cell Culture Medium, Supplemented = cat. # 11605-011)

SIGMA (TNM-FH Insect Medium = cat. # T3285)

JRH Biosciences (Hink's TNM-FH Insect Medium = cat. # 51-94278)

*(These are the liquid formulations. Some manufacturers also supply them as dry powders that are less expensive but require more preparation time. None of these products contain fetal bovine serum.)*

**Subculture procedure:** Vesicles or clumps disrupted by gentle pipetting. Centrifuge at low speed. Discard old medium and resuspend into fresh. Currently cells are split at ~1:15 weekly.

**Comments:** Vesicles change morphologically and biochemically in response to 20-hydroxyecdysone. Cultures spontaneously changed to aggregates after a year in culture but can be changed back to vesicles with hemolymph.

**Reference:** Lynn, D. E., S. G. Miller, and H. Oberlander 1982. **Proc. Natl. Acad Sci USA** 79: 2589-2593.

*Distribution of cell lines from the Insect Biocontrol Laboratory requires a material transfer agreement between the recipient's organization and the **Agricultural Research Service**.*