

# TO (Tuck-Ordinary)

## HsdOla:TO

Stock originally developed prior to 1940 by Dr M. Theiler, State Serum Institute, Denmark, for studies of virus infections causing encephalomyelitis in mice. In 1953, to National Institute of Medical Research, Mill Hill. To Clinical Research Centre, Harrow in 1970.

From Clinical Research Centre, Harrow to OLAC (Harlan) in 1979. Maintained as a closed colony since. Harlan became Envigo in 2015, then Envigo was acquired by Inotiv in 2021.

### CHARACTERISTICS

This is a reasonable vigorous outbred stock, which may be used by those wanting to use an outbred stock, but who find that for some reason the MF1 mouse is not ideal.

#### Anatomy

3,6 % Exencephaly at birth (Padmanabhan *et al*, 1994).

#### Behavior

Males are very aggressive intraspecies and interspecies (Brain *et al*, 1978). Decrease of aggression after administration of alcohol, but less sensitive than in Swiss mice (Smoothy *et al*, 1983). Intermediate aggression in putative test of aggression, compared to seven different stocks and strains (Jones *et al*, 1987)

#### Drugs

Retinoic acid-induced asymmetric craniofacial growth and cleft palate (Padmanabhan and Ahmad 1997). Aspirin is protecting against alcohol-induced neural tube defects (Padmanabhan *et al*, 1994). Sensitive to carcinogenesis by 15,16-dihydro-11-methylcyclo-pental(a) phenanthren-17-one (Abbott 1983; Abbott *et al*, 1981; Coombs *et al*, 1979; Coombs *et al*, 1980).

#### Genetics

##### Coat color genes

- c : albino

Other genes are variable (outbred stock).

#### Husbandry

Preferences for sleeping and nesting materials have been described by Sherwin (1996; 1997).

#### Infection

*Chlamydia trachomatis* is causing infertility in C3H mice but not in TO mice (Tuffrey *et al*, 1986). Resistant to *Onchocerca lienalis*, compared to other strains like CBA, C56Bl/10 and BALB.K (Folkard *et al*, 1995).

#### Physiology and biochemistry

CBA mice exhibited their peak blood alcohol concentrations around 7pm and blood alcohol concentrations remained relatively high until 5am. Conversely, for the TO mice the peak blood alcohol concentrations were observed at 9am and dropped rapidly afterwards. (Jelic *et al*, 1998).





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