

Dunkin Hartley

HsdDhl:DH

Dunkin Hartley stock. Originally from the SPF unit at the Agricultural Research Centre, Compton in 1976. Closed colony since.

Stock was obtained from Hall in 2006 due to closing down of this facility. Harlan became Envigo in 2015, then Envigo was acquired by Inotiv in 2021.

CHARACTERISTICS

A good compact animal. Together with primates, the guinea pig is the only laboratory animal with a dietary vitamin C requirement. Guinea pigs are a very good source of serum complement. They are also used in otological research, as the hearing range and structures of the ear are similar to those of humans. Guinea pigs have been widely used in studies of immunology, particular in studies of delayed hypersensitivity in which its response resembles that of man (Gell and Benacerraf, 1961). Other areas of immunology are in studies of anaphylactic shock (Stone et al, 1964), and allergic encephalomyelitis (Takino et al, 1971). Hematological parameters have been described by Williams and Festing (1971).

Genetics

Coat colour genes

• Ce: albino.

Other genes are variable (outbred stock).

REFERENCES

- Blau JN (1971) Histological changes and macrophage activity in the adult guinea pig thymus. Br. J. Exp. Pathol. 52, 142-146
- Burns KF and De Lannoy CW (1966) Compendium of normal blood values of laboratory animals, with indication of variations. I. Random-sexed populations of small animals. Toxicol. Appl. Pharmacol. 8, 429-437.
- 3. Burzynski NJ (1971) Aging in guinea pig salivary gland. J. Gerontol. 26, 204-207.
- Challis JRG, Heap RB and Illingworth (1971) Concentration of oestrogen and progesterone in the plasma of nonpregnant, pregnant and lactating guinea pigs. J. Endocrinol. 51, 333-345.
- Endiger RD and Kovatch RM (1976) Spontaneous tumors in the Dunkin-Hartley guinea pig. J. Natl. Cancer Inst. 56, 293-294.
- Erjefält I, Greiff L, Alkner U and Persson CGA (1993) Allergen-induced biphasic plasma exudation responses in guinea pig large airways. Am. Rev. Respir. Di. 148, 695-701.
- Ernstson S (1971) Cochlear morphology in a strain of the walzing guinea pig. Acta Otolaryng. 71, 469-482.
- Gell PGH and Benacerraf B (1961) Delayed hypersensitivity to simple proteins. In: Advances in Immunology (Taliaferro WH and Humphrey JH, eds). New York: Academic Press.
- 9. Festing MFW (1974) Some biological data in guinea-pigs. Guinea-pig Newsletter 8, 5-15.
- 10. Nixon JM (1974) Breathing pattern in the guinea pig. Lab. Anim. 8, 71-77
- 11. Rigby C (1976) Natural infections of guinea pigs. Lab. Anim. 10, 119-142.
- Scheibe G, Ludwig C, Haupt H and Flemmings B (1989) Physiologische Parameter des Meerschweinchens unter Langzeitnarkose mit kontrollierter Beatmung. Z. Versuchstierk. 32, 25-31.
- 13. Stone SH, Liacopoulos P, Liacopoulos-Briot M, Neven T and Halpern BN (1964) Histamine differences in amount available for release in lungs of guinea pigs, susceptible and resistant to acute anaphylaxis. Science 146, 1061-1062.
- Takino Y, Sugahara K and Horino I (1971) Two lines of guinea pigs sensitive and non-sensitive to chemical mediators and anaphylaxis. J. Allergy 47, 247-261.
- 15. Wagner JE and Manning PJ (1976) The biology of the guinea pig. New York: Academic Press.
- 16. Williams J and Festing MFW (1971) A note on some haematological parameters in three strains of guinea pigs. Guinea-pig Newsletter 2, 7-11.

