

Syrian hamster

HsdHan®:AURA

All Syrian hamsters originated from three littermates captured near Aleppo in Syria in 1930, though additional animals were trapped in 1971. In 1973, from Sprague Dawley Company to Central Institute for Laboratory Breeding, Hannover.

In 1994, to Harlan Laboratories, through acquisition of Central Institute for Laboratory Breeding, Hannover. Harlan became Envigo in 2015, then Envigo was acquired by Inotiv in 2021.

CHARACTERISTICS

The Syrian Hamster (*Mesocricetus auratus*) has been used in experimental tumor production, hormonal effects on reproduction, dental caries, nutritional studies, cardiovascular and pharmacological research in infectious disease and pathological investigation. The Syrian hamster is the only common laboratory animal that hibernates. The tendency to hibernate is genetically controlled.

Genetics

Coat color – Brown and white.

REFERENCES

1. Arnold DL and Grice HC (1979) The use of the Syrian hamster in toxicology studies, with emphasis on carcinogenesis bioassays. *Prog. Exp. Tumor Res.* 24, 222-234.
2. Bannon PD and Friedell GH (1966) Values for plasma constituents in normal and tumor bearing golden hamsters. *Lab. Anim. Sci.* 16, 417.
3. Bernfeld P (1979) Longevity of the Syrian hamster. *Prog. Exp. Tumor Res.* 24, 118-126
4. 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.
5. Chaffee RRJ (1966) On experimental selection for super-hibernating and non-hibernating lines of Syrian Hamsters. *J. Theol. Biol.* 12, 151-154.
6. Chen LH, Higgenbotham SM, Patil K and Pour P (1982) Nutritional effects on the life span of Syrian hamsters. *Age* 5, 11-19.
7. Crocker TT, Teeter A and Nielsen B (1970) Postnatal cellular proliferation in mouse and hamster lung. *Cancer Res.* 30, 357-361.
8. Dassenbrock C, Fuhrst R, Heinrich U and Muhle H (1990) Maintenance of the Syrian hamster in chronic inhalation studies. In: *Man and the laboratory animal: perspectives for 1992. 4th FELASA symposium*, Lyon, pp 329-332.
9. Feldman DB, McConnell EE and Knapka JJ (1982) Growth, kidney disease and longevity of Syrian hamsters (*Mesocricetus auratus*) fed varying levels of protein. *Lab. Anim. Sci.* 32, 613-618.
10. Hankenson FC and Van Hoosier Jr GL (2002) Biology and diseases of hamsters. In: *Laboratory Animal Medicine* 2nd edition (Fox JG, Anderson LC, Loew FM and Quimby FW, eds), Academic Press, pp 167-202.
11. Kennedy AR, DesRousiers A, Terzaghi M and Little JB (1978) Morphometric and histological analysis of the lungs of Syrian golden hamsters. *J. Anatom.* 125, 527-553.
12. Kluge R and Rapp KG (1990) Variability of hematological traits in the Syrian hamster: Differences between strains and sexes. In: *Man and the laboratory animal: perspectives for 1992. 4th FELASA symposium*, Lyon, pp 381-383.
13. McEwan Jenkinson D (1970) The distribution of nerves, monoamine oxidase and cholinesterase in the skin of the guinea pig, hamster, mouse, rabbit and rat. *Res. Vet. Sci.* 11, 60-70.
14. Ohwada K (1970) Body service area in the golden Syrian hamster. *Exp. Anim.* 41, 221-224.
15. Pour P, Mohr U, Cardesa A, Althoff J and Kmoch N (1976) Spontaneous tumors and common diseases in two colonies of Syrian hamsters. I. Incidence and sites. *J. Natl. Cancer Inst.* 56, 931-935.
16. Pour P, Mohr U, Cardesa A, Althoff J and Kmoch N (1976) Spontaneous tumors and common diseases in two colonies of Syrian hamsters. II. Respiratory and digestive system. *J. Natl. Cancer Inst.* 56, 936-948
17. Pour P, Mohr U, Cardesa A, Althoff J and Kmoch N (1976) Spontaneous tumors and common diseases in two colonies of Syrian hamsters. III. Urogenital system and endocrine glands. *J. Natl. Cancer Inst.* 56, 949-961.
18. Pour P, Mohr U, Cardesa A, Althoff J and Kmoch N (1976) Spontaneous tumors and common diseases in two colonies of Syrian hamsters. IV. Vascular and lymphatic systems and lesions of other sites. *J. Natl. Cancer Inst.* 56, 963-974.
19. Scharmann W, Nagel P and Heller A (1988) Der Brunstzyklus des Syrischen Hamster. *Z. Versuchstierk.* 31, 276-280.
20. Whittaker D (1999) Hamsters. In: *UFAW Handbook on the Care and Management of Laboratory Animals* (Poole T, ed.), Blackwell science, pp 356-366.
21. Wijnands MW and Woutersen RA (1995) Polymyopathy in a Syrian gold hamster. *Lab. Anim.* 30, 51-54.

