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ACI/Seg, Rat Strain

National Cancer Institute

Source

National Cancer Institute. <u>ACI/Seg, Rat Strain</u>. NCI Thesaurus. Code C76184.

Derived by Curtiss and Dunning (1926) at Columbia University by crossing an inbred August rat with an inbred Copenhagen rat, to Heston (1945) and then to the NIH in 1950. Disseminated to Harlan Sprague-Dawley from laboratory of Segaloff (Alton Ochsner Medican Foundation) in 1956. The ACI/Seg rat is agouti in color, with a white belly and feet, genotype A hi. This strain is susceptible to a variety of neoplasms including testicular, adrenal, pituitary, and skin and ear duct tumors in males and pituitary, uterine, mammary, and adrenal tumors in females. Additionally, 20-30% of ACI/Seg rats have been shown to have an absent, hypoplastic, or cystic kidney on one side. This strain develops spontaneous prostate cancer with age and is used as a rat model of human prostate cancer in biomedical research. This strain has a average life span of two years and exhibits poor breeding performance and low litter size.