

# Dumbo eared

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## Origin



A dumbo pearl self doe with good ear shape

Dumbo eared rats appeared in the North West coast in the USA in the 90's. In May 1999 they were imported to the UK (Hawthorn rat varieties, 2015). Dumbo eared were scientifically described in 2010 and in 2012 (Kuramoto, *et al.* 2010 & Quina, *et al.* 2012).

## South African History

Dumbo eared come from rats imported in 2006 by Liezel Hattingh. All South African dumbo eared rats come from three of the imported rats, namely: MS Odin; MS Orla and MS Monkey.



A dumbo agouti berkshire doe with folded ears



A dumbo pearl self buck with creased ears

## Description



A dumbo black irish buck with tulip ears

"Ears to be large and round and set low on the sides of the head. The base of the ears is set at the back of the cheek and are wider and more open than in standard rats. Head shape is similar to that of standard rats although it may appear different due to position of ears. Body may be more stocky than in standard rats." – S.A.R.F.C. Standards

It is easy to breed bad ear shape into a dumbo eared line, yet ear shape can be corrected by selective breeding and crossing with dumbo eared rats with good ear shape. Faults to avoid when breeding dumbo eared rats include pointed ears (aka tulip ears or pixie ears) and creased ears or folded ears. Show quality dumbo eared rats have large, open and round ears without any creases.



A dumbo pearl self kitten with good ear shape



A dumbo agouti berkshire doe with good ear shape

## Genetics

The gene causing dumbo eared is a recessive gene located on chromosome 14 (Quina, *et al.* 2012). A dumbo eared rat is simply  $du/du$ . Dumbo eared rats can be bred in any colour or marking.



A dumbo black irish buck with pixie ears



A dumbo brown burmese self doe with slightly folded ears

## References

1. HAWTHORN RAT VARIETIES. 2015. Available at: <http://www.ratvarieties.com/type/dumbo/>
2. KURAMOTO, T.; YOKOE, M.; YAGASAKI, K.; KAWAGUCHI, T. KUMAFUJI, K. & SERIWAKA, T. 2010. Genetic Analysis of Fancy Derived Mutations. *Experimental Animals* 59(2): 147-155.
3. QUINA, L.A.; KURAMOTO, T.; LAQUETTI, D.V.; COX, T.C.; SERIWAKA, T. & TURNER, E.E. 2012. Deletion of a conserved regulatory element required for Hmx1 expression in craniofacial mesenchyme in the dumbo rat: a newly identified cause of congenital ear malformation.