



Hypotrichosis

Hypotrichosis congenita is a viable hypotrichosis, meaning that the disease is not immediately fatal to affected newborns.

In Australia, the presence of Hypotrichosis was initially observed in Poll Dorset sheep. Since then it has also been observed in White Suffolk, Suffolk and Composite Maternal/Terminal breeds. Hypotrichosis, also known as Hairless, has also been reported in other mammalian species.

Affected lambs are generally born with little or no hair on the head, ears and legs and develop a thick leathery skin. Wool on the body is lower density than the average sheep, and shedding of this remaining wool occurs as the animal ages.

Hypotrichosis is a Mendelian recessive trait, meaning that both parents must contain the recessive gene before it is expressed. Crossing of two hypotrichosis carrier parents will result in 25% affected lambs.

1. HH (non-carrier) x Hh (carrier) =

50% non-carriers (HH)

50% carriers (Hh)

NO Hypotrichosis affected lambs

2. Hh (carrier) x Hh (carrier) =

25% non-carriers (HH)

50% carriers (Hh)

25% Hypotrichosis affected lambs(hh)

Testing for Hypotrichosis status

NEOGEN's Smart Flock Elite Hypotrichosis Bundle includes testing for Hypotrichosis status.

The Hypotrichosis test is validated in the White Suffolk sheep breed.

The Smart Flock Elite Hypotrichosis Bundle can be ordered via sheepdna.com.au or by completing NEOGEN's submissions form.



Reporting of Test Results

NEOGEN's test for Hypotrichosis is validated in the White Suffolk sheep breed.

Results are reported as:

N – Hypotrichosis Free

C – Hypotrichosis Carrier

A – Hypotrichosis Affected

INFORMATION SOURCES:

Dolling, C.H.S., Brooker, M.G. (1966) A viable hypotrichosis in Poll Dorset sheep. *Journal of Heredity* 57:87-90

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Mackie, J.T., McIntyre, B. (1992) Congenital Hypotrichosis in Poll Dorset Sheep. *Australian Veterinary Journal* 69:146-147

Nel J A. (1964) Hypotrichosis congenita in Karakul sheep. *S Afr J Agric Sci* 7:875-878

<https://www.whitesuffolk.com.au/hypo-update/>