Coat Length

About coat length

The fibroblast growth factor 5 (FGF5) gene determines the length of a cat’s hair. The wild-type form of the gene causes short hair and is dominant.

Four mutations have been identified in the FGF5 gene that are associated with long hair; these mutations are recessive. Long haired cats have either two copies of the same mutation or two different mutations. The M4 mutation is found in all breeds of long-haired cat, whilst the M1, M2 and M3 mutations are more breed specific.

Mutation #1 (M1) - Found in Ragdoll and Siberian

Mutation #2 (M2) - Found in Norwegian Forest Cat, Siberian, Tiffanie, Asian and Burmilla

Mutation #3 (M3) - Found in Ragdoll, Maine Coon and Devon Rex. Also very rarely in British Shorthairs.

Mutation #4 (M4) - Found in all breeds of cat including Ragdoll, Maine Coon, Norwegian Forest Cat, Siberian, Tiffanie, Asian, Burmilla and Devon Rex

When submitting samples please ensure you state the breed, we will then test for the long hair mutations relevant to that breed.

Interpretation of results

N/N - the cat does not have the respective long hair mutation. It will have short hair.

N/M1, N/M2, N/M3, N/M4 - the cat carries one copy of the respective long hair mutation. It will have short hair.

M1/M1, M2/M2, M3/M3, M4/M4 - the cat has two copies of the respective long hair mutation. It will have long hair.

If the cat carries TWO of the long hair mutations (N/M1 & N/M2 or N/M1 & N/M3 or N/M1 & N/M4 or N/M2 & N/M3 or N/M2 & N/M4 or N/M3 & N/M4) it will have long hair.