Aubs
MAINE COONS

Dear Buyer,

Here at Aubs Maine Coon's I do genetic testing on all of my breeding cats. The main thing I am testing for is Blood Type (mating the wrong blood types can result in the death of all of the kittens after birth), and to rule out carriers of HCM, SMA, and PKD. I also test to see what color genes they carry that better help determine color possibilities and make decisions on who I pair with who based on what they carry.

All of our cats are clear for HCM, SMA and PKD. Some of my cats are carriers of other genes such as MDR1 medication sensitive, PKdef (not the same as PKD), and Factor XII Deficiency (Variant 1 and Variant 2). These specific genes are not an issue especially when bred to a non-carrier.

Some breeders choose to not have any carriers in their breeding program and I respect that. But you have to keep in mind that cats have been around for thousands of years. These gene's aren't new. Generic testing is also very new, and while it's great to be aware, it also has people freaking out about things they don't need to be freaking out about. Do we genetically test a sexual partner before having kids? If a kid has a peanut allergy or sensitivity to medicine, or a genetic trait that can be passed onto future kids, do we sterilize them? No!

So take MDR1 for example…carriers with 1 copy have a smaller risk of medication sensitivity than those with 2 copies. All it means is you need to let your vet know and don't overdose your cat with certain medication's…which, you shouldn't be doing anyways. Drug makers already take those with MDR1 into consideration when making the drug as it is a common condition in the dog community. I have one girl, Penny, who has 2 copies. Breeding a cat with two copies of the MDR1 (medication sensitivity) gene to a cat with zero copies is generally considered a responsible approach to managing the genetic trait while preserving other valuable characteristics of the affected cat. Since the cat with zero copies will not pass the mutation to its offspring, the resulting kittens will inherit only one copy of the MDR1 gene. This means they will be carriers of the gene but will not express the medication sensitivity themselves, allowing them to live normal, healthy lives. It just requires letting your vet know and again, I stress this…..don't overdose on medications. A cat with or without that gene shouldn't ever be over dosed anyways. If a parent carries one of the above mentions genes, all of the kitten's will be genetically tested to see if they are carriers as well.

You can read more about MDR1 medication sensitivity here (please take special note at the bottom where it talks about breeders and what it means if a cat is a carrier):
https://www.wisdompanel.com/app/explore/health/tests/multidrug-resistance-1

You can read about PKdef here (please take special note at the bottom where it talks about breeders and what it means if a cat is a carrier): https://www.wisdompanel.com/app/explore/health/tests/pyruvate-kinase-deficiency

You can read about Factor XII Deficiency (Variant 1 and Variant 2) here (please take special note at the bottom where it talks about breeders and what it means if a cat is a carrier): https://www.wisdompanel.com/app/explore/health/tests/factor-xii-deficiency-variant-1

So why do I choose to still breed those who are carriers of certain genes to a cat with no copies? Breeding in this way helps maintain genetic diversity and desirable traits in the breed without propagating the risks associated with two copies of the gene. Maintaining genetic diversity in cat breeding is crucial for the overall health and vitality of the breed. A diverse gene pool reduces the risk of inherited diseases, as it minimizes the likelihood of recessive genes that cause health issues being passed down through generations. When breeders focus on increasing genetic diversity, they help maintain robust immune systems and better adaptability to environmental changes. Furthermore, diversity ensures the preservation of unique traits and characteristics within a breed, preventing genetic bottlenecks that can arise from overbreeding closely related cats. This not only promotes the longevity and well-being of individual cats but also supports the sustainability of the breed as a whole. Again, cats have been here for thousands of years. These gene's aren't anything new. The main ones of concern are HCM, PKD and SMA. And even with HCM, new studies are showing that cats with 1 copy of the HCM genes does not mean the cat will develop HCM.

It is not irresponsible breeding in any way to breed a carrier to a non-carrier. What would be irresponsible is if every breeder sterilized every carrier of certain genes. Who knows what impact that would have long term on the cat population. Genetic diversity isn't a bad thing. These gene's won't have a negative impact on the offspring when they only have 1 copy. So, with that being said, I hope that helps you better understand genes, and why I choose to still breed those who do carry certain genes. Don't hesitate to do your own research and come to your own conclusion. And don't hesitate to reach out with any questions!

Sincerely,

Aubs Maine Coons