

# VETERINARY TECHNICAL DATASHEET

Canine Multifocal Retinopathy 3, (CMR3); mutation originally found in Lapponian Herder



Mutation Found In :Lapponian Herder

## Disorder Type

- Eye

## Disease Severity

- Mild/moderate

## Background

Canine multifocal retinopathy (CMR) is an inherited eye disease found in multiple breeds, with CMR3 noted in the Lapponian Herder. It is characterized by several localized, round, bullous alterations of variable size and location in the retina at the back of the eye that cause retinal decay.

## Key Signs

- Retinal degeneration

## Clinical Description

Typically, the first ocular fundus changes in CMR3 can be diagnosed by the age of four months. In many cases, the lesions may appear to heal or even go away, sometimes leaving no evidence or only a wrinkle at the site of the healed lesion. In almost all cases, lesions from CMR3 do not progress significantly over time, so there is generally no reduction in eyesight though more serious cases could exhibit vision impairment. Very seldom is the patient completely blinded.

## Mode of Inheritance

- autosomal recessive

## Gene Name

- BEST1

## Next Steps

Monitor fundus changes for evidence of healing and monitor patient for any signs of visual impairment.

## References

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Zangerl B, Wickström K, Slavik J, Lindauer SJ, Ahonen S, Schelling C, Lohi H, Guziewicz KE, Aguirre GD. Assessment of canine BEST1 variations identifies new mutations and establishes an independent bestrophinopathy model (cmr3). Mol Vis 16:2791-2804, 2010.