THE TECHNOLOGY

Progressive Retinal Atrophy (PRA) is a heterogeneous class of retinal disorders that share a broadly similar clinical disease phenotype. The dog may be classified into developmental and degenerative diseases. The developmental class comprises several genetically distinct diseases expressed cytologically in the immediate postnatal period when visual cells in the canine retina begin to differentiate. In contrast, the degenerative class represents defects in which photoreceptor cells degenerate after having differentiated normally - this class includes the specific disease termed progressive rod-cone degeneration (*prcd*). This specific form of PRA is an autosomal recessively inherited, late-onset retinal degenerations affecting several different breeds of dog. This invention has identified the gene on chromosome 9 and the point mutation that causes *prcd* in dogs.

Patents	US 7,312,037
Issued	Dec 25, 2007
Inventors	Gustavo Aguirre & Gregory Acland
Licensee	OptiGen, LLC

THE PRODUCT

prcd-PRA Test

The *prcd*-PRA test is done on a small sample of blood from the dog. The test analyzes the specific DNA mutation causing the prcd-PRA. The test detects the mutant, abnormal gene copy and the normal gene copy. The result of the test is a genotype and allows separation of dogs into three groups: Normal/Clear (homozygous normal), Carrier (heterozygous), and Affected (homozygous mutant).