

## Border Collie



[Labgenvet](#)

[Donner, 2018](#)

[Donner, 2023](#)

| Disease                                                                   | Gene    | Reference       | # tests | M/N   |                 |
|---------------------------------------------------------------------------|---------|-----------------|---------|-------|-----------------|
| <a href="#">Collie Eye Anomaly (CEA)</a>                                  | NHEJ1   | Labgenvet, 2021 | 85      | 31.8% |                 |
|                                                                           |         | Donner, 2018    | 125     | 20.8% |                 |
|                                                                           |         | Donner, 2023    | 6714    | 19.8% |                 |
| <a href="#">Intestinal Cobalamin Malabsorption (CUBN-related)</a>         | CUBN    | Labgenvet, 2021 | 23      | 13.0% |                 |
|                                                                           |         | Donner, 2018    | 107     | 6.5%  |                 |
|                                                                           |         | Donner, 2023    | 6714    | 7.0%  |                 |
| <a href="#">Trapped Neutrophil Syndrome (TNS)</a>                         | VPS13B  | Labgenvet, 2021 | 31      | 12.9% |                 |
|                                                                           |         | Donner, 2018    | 125     | 8.0%  |                 |
|                                                                           |         | Donner, 2023    | 6714    | 5.4%  |                 |
| <a href="#">Dental Hypomineralisation</a>                                 | FAM20C  | Labgenvet, 2021 | 16      | 43.8% |                 |
|                                                                           |         | Donner, 2023    | 6706    | 2.1%  |                 |
| <a href="#">Dilated Cardiomyopathy risk factor (TTN-related)</a>          | TTN     | Donner, 2023    | 6714    | 2.0%  | <b>DOMINANT</b> |
| <a href="#">Sensory Neuropathy (Border Collie)</a>                        | FAM134B | Labgenvet, 2021 | 16      | 43.8% |                 |
|                                                                           |         | Donner, 2023    | 6714    | 1.4%  |                 |
| <a href="#">MDR1 Medication Sensitivity</a>                               | ABCB1   | Labgenvet, 2021 | 51      | 3.9%  | <b>DOMINANT</b> |
|                                                                           |         | Donner, 2018    | 125     | 0.8%  |                 |
|                                                                           |         | Donner, 2023    | 6712    | 0.92% |                 |
| <a href="#">Von Willebrand's Disease, Type 2 (vWD 2)</a>                  | VWF     | Donner, 2018    | 107     | 14.0% |                 |
|                                                                           |         | Donner, 2023    | 6713    | 0.0%  |                 |
| <a href="#">Degenerative Myelopathy (DM)</a>                              | SOD1    | Labgenvet, 2021 | 16      | 11.7% |                 |
|                                                                           |         | Donner, 2023    | 6714    | 0.7%  |                 |
| <a href="#">Exercise-Induced Collapse (EIC)</a>                           | DNM1    | Donner, 2018    | 125     | 0.8%  |                 |
|                                                                           |         | Donner, 2023    | 6713    | 0.45% |                 |
| <a href="#">Myotonia Congenita (Australian Cattle Dog)</a>                | FAM134B | Donner, 2018    | 107     | 2.8%  |                 |
|                                                                           |         | Donner, 2023    | 6714    | 0.45% |                 |
| <a href="#">Cystinuria Type II-A (Australian Cattle Dog)</a>              | SLC3A1  | Donner, 2018    | 107     | 1.8%  |                 |
|                                                                           |         | Donner, 2023    | 6714    | 0.04% |                 |
| <a href="#">Von Willebrand's Disease, Type 1 (vWD 1)</a>                  | VWF     | Donner, 2023    | 6714    | 0.24% |                 |
| <a href="#">Progressive Rod-Cone Degeneration (prcd-PRA)</a>              | PRCD    | Donner, 2023    | 6704    | 0.21% |                 |
| <a href="#">Dilated Cardiomyopathy risk factor (PDK4-related)</a>         | PDK4    | Donner, 2023    | 6714    | 0.16% | <b>DOMINANT</b> |
| <a href="#">Ichthyosis (Golden Retriever)</a>                             | PNPLA1  | Donner, 2023    | 6714    | 0.15% |                 |
| <a href="#">Cystinuria Type I-A (SLC3A1 p.I192V)</a>                      | SLC3A1  | Donner, 2023    | 6714    | 0.12% |                 |
| <a href="#">Cystinuria Type I-A (SLC3A1 p.S698G)</a>                      | SLC3A1  | Donner, 2023    | 6714    | 0.12% |                 |
| <a href="#">Neuronal Ceroid Lipofuscinosis 5 (Border Collie; NCL5)</a>    | CLN5    | Donner, 2023    | 6714    | 0.12% |                 |
| <a href="#">Chondrodystrophy, Intervertebral Disc Disease Risk (CDDY)</a> | FGF4    | Donner, 2023    | 6692    | 0.07% |                 |
| <a href="#">Cone-Rod Dystrophy (cord1-PRA/crd4)</a>                       | RPGRIP1 | Donner, 2023    | 6703    | 0.06% |                 |
| <a href="#">Hyperuricosuria (HUU)</a>                                     | SLC2A9  | Donner, 2023    | 6714    | 0.06% |                 |
| <a href="#">Bald Thigh Syndrome (Sighthounds)</a>                         | IGFBP5  | Donner, 2023    | 2115    | 0.05% |                 |
| <a href="#">Cystinuria Type I-B (SLC7A9 p.A217T)</a>                      | SLC7A9  | Donner, 2023    | 6712    | 0.03% |                 |

|                                                                      |          |              |      |       |
|----------------------------------------------------------------------|----------|--------------|------|-------|
| <a href="#">Amelogenesis Imperfecta (Parson Russell Terrier; AI)</a> | ENAM     | Donner, 2023 | 6714 | 0.03% |
| <a href="#">Canine Multifocal Retinopathy 1 (Mastiff; CMR1)</a>      | BEST1    | Donner, 2023 | 6714 | 0.03% |
| <a href="#">Cranio-mandibular Osteopathy (Terrier)</a>               | SLC37A2  | Donner, 2023 | 6714 | 0.03% |
| <a href="#">Primary Lens Luxation (PLL)</a>                          | ADAMTS17 | Donner, 2023 | 6714 | 0.03% |
| <a href="#">Early-Onset Progressive Polyneuropathy (Greyhound)</a>   | NDRG1    | Donner, 2023 | 6712 | 0.01% |
| <a href="#">Neuronal Ceroid Lipofuscinosis 4A (NCL4A)</a>            | ARSG     | Donner, 2023 | 6712 | 0.01% |
| <a href="#">Dilated Cardiomyopathy (Schnauzer; DCM)</a>              | RBM20    | Donner, 2023 | 6714 | 0.01% |

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