

Molecular Screening of Canine *SLC26A2* (Sulfate Transporter) in German Shepherd Dogs with Hip Dysplasia

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We report the first isolation and characterization of the canine *SLC26A2* (known as diastrophic dysplasia sulfate transporter; *DTDST*) gene. This canine homologue has high homology in genomic structure and functional domains to other *SLC26A2* across a number of different species. Given the critical role of *SLC26A2* in sulfation of proteoglycans in cartilage matrix as seen in human dystrophic bone diseases, the availability of the canine *SLC26A2* provides a good starting point for identifying mutations that may be responsible for certain forms of dystrophic bone diseases including hip dysplasia.

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