**Table S1** Survey of ED cases and suspected ED cases in domestic animals and dogs.

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| --- | --- | --- | --- | --- | --- |
| Species | Breed | ED suspected by phenotype | ED confirmed | Affected gene | Source |
| Mouse | Tabby mutant | - | x | *EDA* | (Srivastava et al. 1997) |
| Cattle | German Holstein | - | x | *EDA* | (Drögemüller et al. 2001) |
| Medaka fish | - | - | x | *EDAR* | (Kondo et al. 2001) |
| Horse | Thoroughbred | x | - | - | (Ramzan et al. 2001) |
| Dog | German Shepherd | - | x | *EDA* | (Casal et al. 2005) |
| Dog | Mixed breed | - | x | *EDA* | (Waluk et al. 2016) |
| Dog | Xoloitzcuintle and Chinese crested dog | - | x | *FOXI3* | (Drögemüller et al. 2008) |
| Dog | Chesapeake Bay Retriever | - | x | *PKP1* | (Olivry et al. 2012) |
| Dog | Labrador Retriever | x | - | - | (Kunkle 1984) |
| Dog | Miniature Poodle | x | - | - | (Selmanowitz et al. 1970) |
| Dog | Whippet | x | - | - | (Thomsett 1961) |
| Dog | Cocker Spaniel | x | - | - | (Kral and Schwartzman 1964) |
| Dog | Basset Hound | x | - | - | (Chastain and Swayne 1985) |
| Dog | Miniature Pinscher x Pekingese | x | - | - | (Moura and Cirio 2004) |
| Dog | Bichon Frisé | x | - | - | (Grieshaber et al. 1986) |
| Dog | Belgian Shepherd, Beagle, Rottweiler, Yorkshire Terrier, French Bulldog and Lhasa Apso | x | - | - | (Miller et al. 2013) |