

## Supplementary Information File 1. Genotypes of the described canine ataxia-related variants in Malinois dogs.

OMIA ID <sup>1</sup>	Gene ID	Gene symbol	Variant	Reference	N (wt/wt)	N (wt/mt)	N (mt/mt)	OMIM ID counterpart <sup>2</sup>
002110-9615	489479	<i>ATP1B2</i>	NC_006587.3(XM_546597.6):c.130_131insLT796559.1:g.50_276	Mauri <i>et al</i> , 2017	5 <sup>A</sup>	0	0	NA
001820-9615	483745	<i>CAPN1</i>	NC_006600.3(XM_540866.5):c.344G>A	Forman <i>et al</i> , 2013	5 <sup>A</sup>	0	0	616907
000078-9615	484024	<i>GRM1</i>	NC_006583.3(XM_005615490.3):c.2316_2317ins62 <sup>3</sup>	Zeng <i>et al</i> , 2011	5 <sup>A</sup>	0	0	614831,617691
002097-9615	476548	<i>ITPR1</i>	NC_006602.3:g.12880740CTT[7_651]	Forman <i>et al</i> , 2015	5 <sup>A</sup>	0	0	117360,206700,606658
002089-9615	488635	<i>KCNJ10</i>	NC_006620.3(XM_545752.6):c.627C>G	Gilliam <i>et al</i> , 2014	5 <sup>A</sup>	0	0	612780
002089-9615	488635	<i>KCNJ10</i>	NC_006620.3:g.22141027_22141028insC	Gast <i>et al</i> , 2016	4 <sup>A</sup> /11 <sup>H</sup> /52 <sup>R</sup>	1 <sup>A</sup> /2 <sup>H</sup> /5 <sup>R</sup>	0	612780
002089-9615	488635	<i>KCNJ10</i>	NC_006620.3(XM_545752.6):c.986T>C	Van Poucke <i>et al</i> , 2017	5 <sup>A</sup>	0	0	612780
001913-9615	479277	<i>RAB24</i>	NC_006586.3(XM_536420.6):c.113A>C	Agler <i>et al</i> , 2014	5 <sup>A</sup>	0	0	NA
001692-9615	480409	<i>SEL1L</i>	NC_006590.3(XM_022422296.1):c.1972T>C	Kyöstilä <i>et al</i> , 2012	5 <sup>A</sup>	0	0	NA
002034-9615	474985	<i>SNX14</i>	NC_006594.3(XM_022426319.1):c.2653+1G>A	Fenn <i>et al</i> , 2016	5 <sup>A</sup>	0	0	616354
002092-9615	483706	<i>SPTBN2</i>	NC_006600.3(XM_005631422.3):c.5855_5862del	Forman <i>et al</i> , 2012	5 <sup>A</sup>	0	0	600224,615386

N: number of dogs with specified genotype in <sup>A</sup> affected (N=5) and <sup>H</sup> healthy (N=13) Malinois dog family members and <sup>R</sup> reference Malinois dogs (N=57)

<sup>1</sup> Online Mendelian Inheritance in Animals, OMIA. Faculty of Veterinary Science, University of Sydney, Sydney. URL: <http://omia.angis.org.au/> (accessed January 2019).

<sup>2</sup> Online Mendelian Inheritance in Man, OMIM. McKusick-Nathans Institute of Genetic Medicine, Johns Hopkins University, Baltimore, MD. URL: <https://omim.org/> (accessed January 2019).

<sup>3</sup> The 62-bp insertion comprises AAGACCCGCAACGTAAAAAAAAAATAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAAA

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