

Supplemental Data

***KIF1A*, an Axonal Transporter of Synaptic Vesicles,
Is Mutated in Hereditary Sensory
and Autonomic Neuropathy Type 2**

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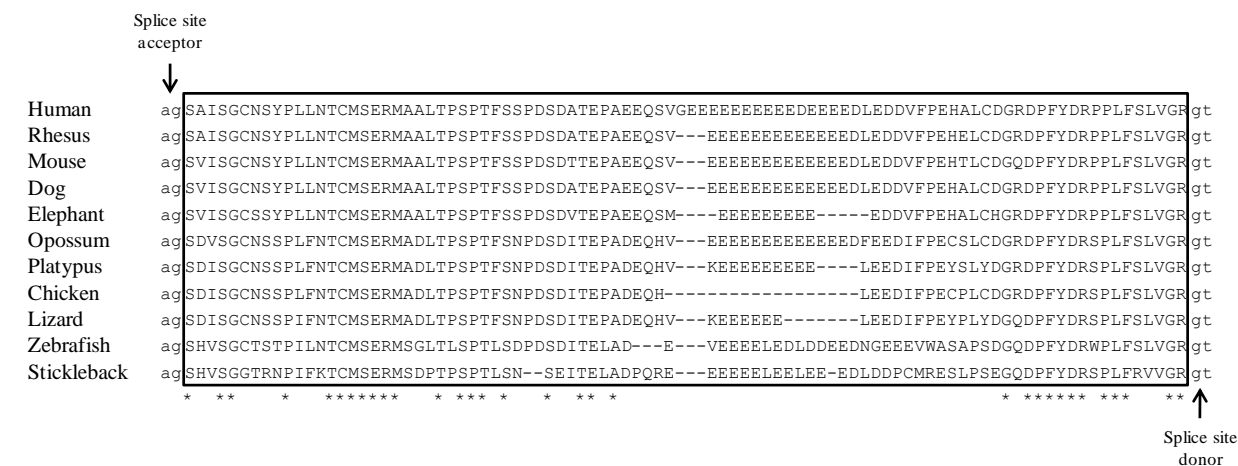


Figure S1. Conservation across species of splice acceptor/donor sites and amino acid sequence of exon 25b. Asterisks below the residues indicate amino acids fully conserved across the different species.

Table S1. Primer sequences for *KIF1A* screening, and characterization of the *KIF1A* exon 25b-containing isoform.

Exon	Template	Forward Primer	Reverse Primer
2	Genomic DNA	CTGTCCTGCCTCCTCAGATA	CCCATAGGCACAGGACCAT
3	Genomic DNA	TCCCCACCTTGGAGTGTAGA	AGCGGCTCAGAGAAGTTGAG
4	Genomic DNA	GCAGACATGATGGGCTGAG	CCTCCTGACTCCCTGTCT
5	Genomic DNA	CACAGGCTGCCCACAGTAT	GGCACTCACTTTGCATCAGA
6	Genomic DNA	CATCTCCTCACTCAGGGGTC	GAGGTGAAGGGGCTTCCTC
7	Genomic DNA	ATGACCTGGTTCAGAGGGCT	GACCACCACCCTACCCT
8	Genomic DNA	AACAGCTGTGGAGACCTTGC	CTCCTGCCACCCACTCTG
9	Genomic DNA	GTGGCCTCCACTCCACAC	CGGAAACGAGGGTGACAG
10	Genomic DNA	AGACCACGGGGTGGTAGAG	GCCAATGCAGGGCAGAC
11	Genomic DNA	CAGCTTTGAGGACCCACTTG	AGTGGGAAGAAGGGCAC
12	Genomic DNA	CAGCCTCCCATCTGTAAT	TGGTCACTGGTGCTTCCTAA
13	Genomic DNA	CTCTAGGCACCTTGGGAC	CCCAGGAGAGAGGATGTGAT
13b	Genomic DNA	TGACCCTCTGGAGACAAACC	GTTCACCCCTCCCTGACC
14	Genomic DNA	CCATAGACGTGTCCGACCTT	TGCCTCTCTAACTCCTCCGA
15	Genomic DNA	GAATATGGCGCTTGTGCTTT	AGGGCTCAGTGCTCATCCT
16	Genomic DNA	CCCCATTGGTCAGCCAG	GTGCTCCCTACTTCCAGG
17_18	Genomic DNA	GGTAGTCTGGTGCCTGGAGA	TTAGTGCTGGGTAAGCTGGG
19	Genomic DNA	AGGGAAAAGAGAGGCGAGAG	CTTGGACATGGGAACAGAGG
20_21	Genomic DNA	CCCTTCTCCTCACGCCT	TTAGATGCAAGAGATGGGGC
22	Genomic DNA	CTGTCTAGGCGCAGTGTGAG	GCAAAAAGTGCTGACCAGTGA
23	Genomic DNA	CACAGGGTCAGCTTAGGCA	CAAGTAGCTGTCCCGTCAT
24	Genomic DNA	TGAAATCTCCAGAAGGTGGG	CTGCAGGTACTIONGCTGTGAA
25	Genomic DNA	CCACTGTCCCCAGGAGATAA	TGGAAAAGCACTTGTGAGGG
25b	Genomic DNA	TAAAGCAGCATTCTCGATGG	AGCGGTTCTCTGTGCC
26	Genomic DNA	TTTGCAGCTCCATGTTGTGT	CCTCTGCCTGCAAAGGTC
27	Genomic DNA	CCTGTGCCCTCACTTTGACT	CAGGGGTGTTAGAGGAGCAA
28_29	Genomic DNA	GTGGCAGGGTCTACGGTG	CAACACAGCACCAACATGG
30	Genomic DNA	GTGGGTTCACCTGGTAAGG	AGAAGAGGGAGAATGAGCCA
31	Genomic DNA	TGATGTGACTCTCCTCCCC	GCTGGATGAAAAGATCTGGG
32	Genomic DNA	CCTGTAGCCCTTCTGTCTCC	ACAGCCCAGTCACAGAGGAC
33	Genomic DNA	GGCATCTCCTCTTGAGTGT	GGAAGAACCACTCTGGATGC
34_35	Genomic DNA	GTCCACTGTGTCCTGTGCTG	CAGACGCAGAGGTGTGGTTA
36	Genomic DNA	AGCTGGCTTGTGACAGG	GTCACCTTGTGTGGCTGAAC
36b	Genomic DNA	GCCGGTGCTTGTCTGAC	CCGAGGAGAAAGGAACCTCG
37	Genomic DNA	CCCTTGTCTGTGCTCTGTG	TCTGGGTCATATGGGGTTGT
38	Genomic DNA	AGAAGGCTGGAAGGGCAC	GAGTGTGGCTGGGCCTC

39	Genomic DNA	GGCTGACTGTGCGTTTGATA	AAATGGCAGCTTCGCTGT
40	Genomic DNA	AGAGGGGAGACAGCTTCACA	CTCCAGCTTTTGCTCTGCAC
41	Genomic DNA	GCTGAGGCTGAGCACAAC	GGAGTTGCCAGAAATGACT
42	Genomic DNA	AGGGGTGGGTAGAAGAGCCT	AATGGGAGTTTTCTCAGGG
43	Genomic DNA	TAAGCAGCAGGTGTGGGGTA	GTGCTCTCTGTGCCGAGT
44	Genomic DNA	TGAGGAGGGTGAAGCCTG	TGTCTCCCAAGTATGAGGG
45	Genomic DNA	GTGGTAGATGGTGAGTGCCC	GAGTCTGGGGTGAGCAGATG
46	Genomic DNA	GGGACTTTCCTGGCAGTG	CAGCAGGGCCCTATCAAAT
47	Genomic DNA	CAGGGCACGGTGGATATG	GCTGTCTGGCAGGAGAGG
2 to 25b	cDNA	GGCCGGGGCTTCGGTGAA	GAGTCGGGGCTCGAGAAGGTG
24 to 25b	cDNA	AAGAACGGGGCCACCCACTACT	GAGTCGGGGCTCGAGAAGGTG
25b to 26_27	cDNA	CGGCCGGGACCCGTTTTAC	GGGCTCTTCATCGGCTGAG
25b to 47	cDNA	CGGCCGGGACCCGTTTTAC	CGCATCTGGGCAGACCTCCTTC
25_26 to 27	cDNA (qPCR)	TGGTTCCGGCTGGTGGGCAGGG	GGCGGACGCCAGAGCCATAATCAGG
25b to 27	cDNA (qPCR)	CCCCTGTTCAAGTTTAGTAGGAAGGGC	GGCGGACGCCAGAGCCATAATCAGG
POLR2A	cDNA (qPCR)	CCCCGCTCCATTGCTGCCAA	GTGCAGAGTTGGCTGCCGGT