Table S1: Mutations in mitochondria-linked motor proteins and adaptors causing human diseases

Gene	Disease	Reference
MYH9 (NMMIIA)	Autosomal dominant non-syndromic deafness 17 (DFNA17)	(Dantas et al., 2014; Hildebrand et al., 2006; Lalwani et al., 2000)
	Macrothrombocytopenia and granulocyte inclusions with or without nephritis or sensorineural hearing loss (MATINS)	(Balduini et al., 2011; Heath et al., 2001; Kelley et al., 2000; Kunishima et al., 2001a; Kunishima et al., 2001b; Pecci et al., 2005; Seri et al., 2003)
MYH14 (NMMIIC)	Autosomal dominant non-syndromic deafness 4A (DFNA4A)	(Donaudy et al., 2004)
	Peripheral neuropathy, myopathy, hoarseness and hearing loss (PNMHH)	(Almutawa et al., 2019; Choi et al., 2011)
MYO5A	Griscelli syndrome type 1	(Menasche et al., 2002; Pastural et al., 1997; Pastural et al., 2000)
MYO6	Autosomal dominant deafness 22 (DFAD22)	(Hilgert et al., 2008; Melchionda et al., 2001; Sanggaard et al., 2008)
	Autosomal recessive deafness 37 (DFAR37)	(Ahmed et al., 2003)
	Autosomal dominant deafness with hypertrophic cardiomyopathy (DFNHCM)	(Mohiddin et al., 2004)
KIF1B (Kinesin-3)	Charcot-Marie-Tooth disease type 2A1 (CMT2A1)	(Drew et al., 2015; Zhao et al., 2001)
	Neuroblastoma 1 (NBLST1) Pheochromocytoma (PCC)	(Schlisio et al., 2008)
KBP (KIFBP)	Goldberg-Shprintzen megacolon syndrome (GOSHS)	(Brooks et al., 2005; Drevillon et al., 2013; Valence et al., 2013)
KIF5A (Kinesin-1)	Amyotrophic lateral sclerosis type 25 (ALS25)	(Brenner et al., 2018; Nicolas et al., 2018)
	Hereditary Spastic Paraplegia (SPG10)	(Crimella et al., 2012; Goizet et al., 2009; Reid et al., 2002)
	Neonatal intractable myoclonus (NEIMY)	(DaRe et al., 2013; Duis et al., 2016; Rydzanicz et al., 2017)
KIF5C (Kinesin-1)	Cortical dysplasia complex with other brain malformations 2 (CDCBM2)	(de Ligt et al., 2012; Poirier et al., 2013)
DYNC1H1 (Dynein, DHC)	Charcot-Marie-Tooth disease type 20 (CMT20, axonal)	(Weedon et al., 2011)
	Mental retardation autosomal dominant 13 (MRD13)	(Jamuar et al., 2014; Poirier et al., 2013; Vissers et al., 2010; Willemsen et al., 2012)
	Spinal muscular atrophy, lower extremity-predominant 1, autosomal dominant (SMA-LED1)	(Harms et al., 2010; Harms et al., 2012; Tsurusaki et al., 2012)
DYNC1I2 (Dynein, DIC)	Neurodevelopmental disorder with microcephaly and structural brain anomalities	(Ansar et al., 2019)
DCTN1 (Dynactin, p150^{Glued})	Distal hereditary motor neuronopathy 7B (HMN7B)	(Puls et al., 2003)
	Amyotrophic lateral sclerosis	(Munch et al., 2004)
	Perry syndrome (PERRYS)	(Farrer et al., 2009)
TRAK1	Epileptic encephalopathy, early infantile 68 (EIEE68)	(Anazi et al., 2017; Barel et al., 2017; Sagie et al., 2018)

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