

gRNA sequences for HeLa KO

Gene	Exon	gRNA sequence
VPS29	2	GGCAAAGTGTTCACCGG TG
	3	GGACATCAAGTTATTCCAT G
VPS35L	1	GCAGACGCCATGCTTGTG AG

gRNA sequences for eHAP KO

Gene	UniprotID	gRNA (PAM)	KO verified by SDS-PAGE	Sequencing primers	Mutation	Protein impact
COMMD1	Q8N668	CGCTGGAATAG	Yes	CGGGGATCCTCTTGACTGCTCAAAC CAAAAA / GACAAGCTTTATTGCCCCATTCTGTT CTTCT	c.[356_363del]	p.L119Pfs*7
COMMD2	Q86X83	GCGGCGCCTTC	Yes	CGGGGATCCTTCTGACTTTCATTGCA GTGGT / GACAAGCTTCTTGCAATTTACAGTTG ACCCA	c.[127_129insAA]	p.I43Kfs*43
COMMD3	Q9UBI1	GCCGAGCGGCT	Yes	CGGGGATCCCTTCGACTCCAACGCC TTC / GACAAGCTTAACAATGCTCAGAGTCT GCTCC	c.[138_139insTA]	p.D47Ter
COMMD4	Q9H0A8	AGCGGGATACT	Yes	NA	NA	NA
COMMD5	Q9GZQ3	AGCAATGGCCC	Yes	NA	NA	NA
COMMD6	Q7Z4G1	CGTTGCAGTGA TGCTAAAAGIG G	No antibody available	CGGGGATCCAAGGAAACCAATACTG CCACAT / GACAAGCTTAAACCTGAAACTGTGGA ATCGT	c.[143_144ins(200)]	p.K48Nfs*91
COMMD7	Q86VX2	ACCCTTGCTCG	Yes	NA	NA	NA
COMMD8	Q9NX08	TACCTTATTCGC	Yes	CGGGGATCCTTTAAACAGCTTGCACT TTCCA / GACAAGCTTAGGTCAAGAGTTTGAGA CCAGC	c.[514_531+102del]	p.L172Ter
COMMD9	Q9P000	CACGCCTGGT CGATCTGGACI GG	No antibody available	CGGGGATCCGATACGCTGCCACTGT GAATTA / GACAAGCTTAAGGAGGATAAAGGGGA TGGTA	c.[368_376delins(124);G379A]	p.V124Pfs*19
COMMD 10	Q9Y6G5	AGAATCCGAGTC	Yes	NA	NA	NA

AlphaFold2 predicted complexes

<https://www.modelarchive.org>

Model number	Species	Proteins	ModelArchive ID
1	<i>Homo sapiens</i>	COMMD1-10 + CCDC22 (1-223) + CCDC93 (1-300)	ma-iplv4
2	<i>Homo sapiens</i>	CCDC22 + CCDC93	ma-9nv72
3	<i>Homo sapiens</i>	VPS35L+ VPS26C + VPS29	ma-3cag5
4	<i>Homo sapiens</i>	VPS35L + VPS26C + VPS29 + CCDC22 (1-115) + CCDC22 (386-627) + CCDC93 (378-631)	ma-4097m
5	<i>Homo sapiens</i>	Combined models 1 + 2 + 3	ma-ri7tb
6	<i>Danio rerio</i>	COMMD1-10	ma-99f82
7	<i>Salpingoecia rosetta</i>	COMMD1-10	ma-xfc84