Supplemental Table 2. *Chlamydomonas* strains used in this study

Strain Name	Responsible Protein/Description	Axonemal Defect	Reference
CC-124	N/A	Normal	[1]
CC-125	N/A	Normal	[1]
cw15 (CC-4533)	Likely cell-wall protein, regarded as wild-type in this study	Normal	[2, 3]
fbb18	FBB18	Defects in both ODA and IDAs	Manuscript in preparation
ift46-1 (CC-4375)	IFT46	Paralyzed short cilia, defects in ODA and central-pair	[4, 5]
ift74-1 (CC-5159)	IFT74	Very short or no cilia	[6]
ift74-2 (CC-5161)	IFT74	No cilia	[6]
mot48-1 (*ida10-1*)	MOT48/IDA10	Slight defects in ODA, reduced amounts of some IDAs	[7, 8]
mot48-2 (*ida10-2*)	MOT48/IDA10; a new allele of *mot48*	Slight defects in ODA, reduced amounts of some IDAs	This study, [9]
mot48-2; twi1-1	MOT48/IDA10 and TWI1; PIH double mutants	Slight defects in ODA, greatly reduced amounts of some IDAs, severer than *mot48-2*	This study
mot48-2; twi1-1; TWI1::HA	*mot48-2; twi1-1* strain rescued with 3HA tagged TWI1	Slight defects in ODA, reduced amounts of some IDAs, apparently similar to *mot48-2*	This study
mot48-2; pf13	MOT48/IDA10 and PF13; PIH double mutants	Very short or no cilia, dynein defect not analyzable	This study
mot48-2; MOT48::HA	*mot48-2* strain rescued with 3HA tagged MOT48	Not analyzed	This study
mot48-2; MOT48::mCherry-HA	*mot48-2* strain rescued with mCherry-3HA tagged MOT48	Not analyzed	This study
oda5 (CC-2236)	ODA5	Lacking ODA	[8, 10, 11]
oda7 (CC-2240)	ODA7	Lacking ODA	[8, 10, 12]
oda8 (CC-2242)	ODA8	Lacking ODA	[8, 10, 13]
oda10 (CC-2246)	ODA10	Lacking ODA	[10, 14]
oda11 (CC-2672)	ODA11/DHC13	Lacking HCα of ODA	[10, 15]
oda16-1 (CC-4554)	ODA16	Lacking ODA	[8, 16]

pf13	PF13	Greatly reduced ODA and reduced amounts of some IDAs	[8, 17, 18]
pf13; twi1-1	PF13 and TWI1; PIH double mutants	Greatly reduced ODA and some IDAs, severer than *pf13*	This study
pf22 (CC-1382)	PF22 and TWI1; found to have *twi1-2* background in this study	Lacking ODA and reduced amounts of some IDAs	[17, 19]
pf22 (CC-2495)	PF22	Lacking ODA and reduced amounts of some IDAs	[8, 17, 19]
pf22A (CC-2493)	PF22	Lacking ODA and reduced amounts of some IDAs	[8, 17, 19]
pf23 (CC-1383)	PF23 and TWI1; found to have *twi1-2* background in this study	Slight defects in ODA, greatly reduced amounts of IDAs	[17, 20]
pf23 (CC-3660)	PF23 and TWI1; found to have *twi1-2* background in this study	Slight defects in ODA, greatly reduced amounts of IDAs	[17, 20]
pf23 (5-4)	PF23; parent strain used to map the *PF23/DYX1C1* locus and for part of the rescue experiments in our previous study [20]	Subtle defects in ODA, greatly reduced amounts of some IDAs	[17, 20]
twi1-1	TWI1; progeny from mating cross of wild-type (CC-125) and the LMJ.RY0402.076787 CLiP strain	Slight defects in IDAs “c, e”	This study, [9]
twi1-1; TWI1::HA	*twi1-1* strain rescued with 3HA tagged TWI1	Apparently normal	This study

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