

## SUPPLEMENTAL MATERIAL

**SUPPLEMENTAL FIGURE 1.** The dynein light chain is highly plastic with regard to target peptide binding. A. Super-positioning of four dynein light chain target peptides solved to date. Peptides are modeled in the presence of Dyn2 after a least squares fit of each structure's respective dynein light chain (not shown). Dyn2 is shown in gray surface representation. Peptides are shown in stick format. Nup159 pep2 is shown in purple. The Swallow (Swa) peptide is shown in blue (pdb 3E2B), the dynein intermediate chain (DIC) is shown in orange (pdb 2PG1) and the PIN peptide (pdb 1CMI) is shown in yellow (1-3). Inset shows the orientation of Dyn2 and the peptides in cartoon format. B. The peptides shown in A are presented in stick format and surface representation to highlight unique and differential features. The N-terminal region of the peptides show the greatest diversity. The conserved QT motif is towards the C-terminal region and is colored in green stick format. C. Sequence alignment of the peptides shown in B. The QT motif is highlighted in green, showing divergence in the PIN peptide: QV.

## REFERENCES

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