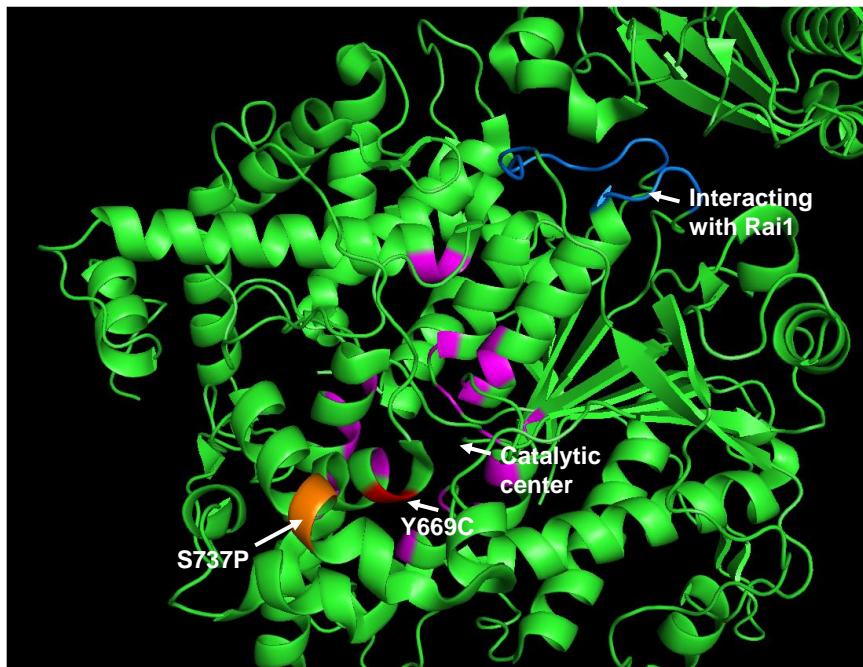


Fig S6

**A**

	<i>dhp1-6</i> (Y669C)	<i>dhp1-5</i> (S737P)
<i>S. pombe</i>	DLASIDV-KFELNQ-PFK <b>E</b> YEQLLGVLPAA	LLPFIDE <b>N</b> RILNAVSKIYPQLTEESKRNE
<i>D. discoideum</i>	FFDQFEYPQ <b>E</b> YEMGE-PFK <b>E</b> FNQLMSVLPPA	LLPFINSIKL <b>L</b> KTISKTEPLLTEEVDRNT
<i>S. cerevisiae</i>	GFSHLEI-K <b>F</b> EEGT-PFLP <b>E</b> YEQLMSVLPA	LLPFIDQ <b>D</b> RLLTA <b>V</b> RAQYPLLSDAERARNI
<i>A. thaliana</i>	DIGEMDI-K <b>F</b> ELGT-PFK <b>E</b> FNQLLGVFPA	KLPFIDE <b>R</b> RLLAEAVSEVEFTLTDEEKRRNS
<i>O. sativa</i>	GLGQLNI-T <b>F</b> ELGS-PFK <b>E</b> FDQLMGVFPA	KLPFIDE <b>A</b> RLAEIKKVEHTLTPEEARRNS
<i>O. tauri</i>	NLAGIST-D <b>F</b> ELGK-PFK <b>E</b> FSQLMGVLPA	LLPWIDS <b>R</b> RLLEQTDMLEYLTTLAEEKRRNS
<i>D. melanogaster</i>	NIQGLST-M <b>F</b> EKGTKPF <b>E</b> NELEQQLMVGVFPA	LLPFVDE <b>K</b> RLLFKALVPYYDQLTGEEVKRNK
<i>H. sapiens</i>	GIADMPS-D <b>F</b> EKGTKPF <b>E</b> KELEQQLMVGVFPA	LLPFVDE <b>R</b> RLLRA <b>A</b> LEEVVYPDLTPEETRNS
<i>M. musculus</i>	GIADMSS-E <b>F</b> EKGTKPF <b>E</b> KELEQQLMVGVFPA	LLPFVDE <b>R</b> RLLRA <b>A</b> LEEVVYPDLTPEENRNS
<i>X. tropicalis</i>	NISCLFK-E <b>F</b> EKGTKPF <b>E</b> KELEQQLMVGVFPA	LLPFVDE <b>R</b> RLLRA <b>A</b> LEEVVYPDLTPDETTRNS
<i>C. elegans</i>	F--VGMRME <b>E</b> ELSE-PFH <b>E</b> QQLLA <b>V</b> LPAA	LI <b>P</b> FIIE <b>K</b> RLL <b>A</b> TEAKRSRLTSEENARNS
<i>T. brucei</i>	LPAVAACVK <b>F</b> DPGK-PFLPH <b>E</b> QQLLA <b>V</b> PPM	LI <b>P</b> FIIE <b>R</b> TL <b>A</b> AYETVQDRVTPEERKNR

**B****C**