

**Supplementary Table S1. CDK9/cyclin T - (S)-CR8 co-crystal structure.** Statistics of the dataset used and of the refined structures.

<b>Data collection</b>	<b>CDK9/cyclin T1/ (S)-CR-8</b>
Beam line	Diamond I-02
	H3
Space group & unit cell (Å)	a=b=173.25 ; c=99.24 $\alpha=\beta=90^\circ$ ; $\gamma=120^\circ$
Resolution (highest resolution shell) (Å)	50.01-3.00 (3.14-3.00)
Total observations	76157 (11267)
Unique	21867 (3222)
$R_{\text{merge}}$	0.074 (0.542)
Multiplicity	3.5 (3.5)
Mean I/ $\sigma(I)$	9.7 (2.1)
Completeness	98.4% (99.3%)
<b>Refinement Statistics</b>	
(highest resolution shell) (Å)	(3.14-3.00)
Total number of atoms	4589
Number of waters	9
R	16.23 (26.99)
$R_{\text{free}}$ (highest resolution shell)	21.47 (33.57)
Rms bonds	0.009
Rms angles	1.153
Coordinates, pdb file #	3LQ5