

## Supplementary information for Finerty, et al.; NMR Dynamics of the pY1021 peptide

$^{15}\text{N}$   $S^2$  values for the pY1021 peptide bound to the PLCC SH2 domain

**LS-2 ( $\tau_c = 6.6$  ns)**

Residue	$S^2$	$dS^2$	$\tau_e$ (ps)	$d\tau_e$	$R_{ex}$ ( $s^{-1}$ )	$dR_{ex}$
D3	0.66	0.007	53	4	0	0
pY4	0.79	0.016	45	8	0.4	0.2
I5	0.76	0.018	0	0	3.9	0.5
I6	0.71	0.020	30	8	2.8	0.3
L8	0.70	0.004	79	4	0	0
D10	0.65	0.004	106	3	0	0
K12	0.39	0.005	55	1	0	0

$^2\text{H}$   $S^2_{axis}$  values for the pY1021 peptide bound to the PLCC SH2 domain

**LS-2 ( $\tau_c = 6.6$  ns)**

Methyl	$S^2$	$dS^2$	$\tau_e$ (ps)	$d\tau_e$
I5 $\delta$ 1	0.35	0.015	20	1
I5 $\gamma$ 2 *	0.81	0.032	108	7
I6 $\delta$ 1	0.27	0.013	29	1
I6 $\gamma$ 2	0.61	0.015	37	2
L8 $\delta$ 1	0.21	0.012	50	2
L8 $\delta$ 2	0.22	0.005	45	0

\* Only the  $R^Q(D_z)$  and  $R^Q(D_+)$  rates were used to calculate  $S^2$  and  $\tau_e$  for the I5 $\gamma$ 2 methyl group.