Table S5. Classification of magnitude Bode plot data of  $C_{\alpha}$  atoms.

Type of function to which	Percentage of residues	Percentage of residues not
frequency response data	modeled with lead-lag	modeled with lead-lag
may be fitted	transfer functions	transfer functions
Monotonic decreasing	55	25
Monotonic increasing	5.0	3.3
No trend	-	7.8
Concave	-	3.9