rigor-like		$\mathbf{post} ext{-rigor}$		overlap
Mode #	$\omega^R$	Mode #	$\omega^P$	$(L_i^R \cdot L_j^P)$
1	0.224	1	0.296	0.87
2	0.429	3	0.530	0.93
3	0.584	2	0.439	0.86
4	0.936	4	0.950	0.84
5	1.208	5	1.144	0.80
6	1.244	6	1.318	0.80
7	1.573	7	1.466	0.82
9	1.789	8	1.677	0.73
10	1.982	11	2.037	0.62
11	2.044	10	1.840	0.64
12	2.305	12	2.245	0.78
13	2.424	13	2.352	0.66
15	2.799	15	2.546	0.78
20	3.310	24	3.519	0.66
21	3.452	21	3.296	0.63

TABLE S3: Normal mode frequencies of highly correlated modes in the rigor-like and post-rigor states of myosin V. An overlap value of 0.6 was used as a lower-bound threshold in selecting highly correlated pairs. The  $\omega$  values are given in wave numbers (cm<sup>-1</sup>).