

Table 1**Estimated catastrophe frequencies of the microtubules at the cortex**

	anterior cortex	posterior cortex
control (N2)	0.31 (/s)	0.72 (/s)
<i>apr-1</i>	0.53 (/s)	0.59 (/s)
<i>mom-5</i>	0.20 (/s)	0.44 (/s)
<i>apr-1; mom-5</i>	0.58 (/s)	0.51 (/s)

When catastrophe occurs stochastically with the frequency of λ , the probability distribution of the cortical residency time will be $P(t) = \lambda \exp(-\lambda t)$. Therefore, the probability of observing cortical residency time between t_1 and t_2 will be $P(t_1 \sim t_2) = \exp(-\lambda t_1) - \exp(-\lambda t_2)$. We fitted the experimentally obtained probability distribution of the cortical MT residency time to this equation to estimate the catastrophe frequencies of the MTs at the cortex