

TABLE A1 Dimensional parameter estimates

Parameter	Definition	Range	Reference
K_d	Equilibrium dissociation constant	10^{-6} – $10^{-8} M^{-1}$	Horwitz et al. (1985), Akiyama and Yamada (1985), Dejana et al. (1988)
R_T	Receptor number	10^4 – 10^7	Akiyama and Yamada (1985), Dejana et al. (1988), Sczekan and Juliano (1990)
k_c	Endocytosis rate	10^{-6} – $10^{-2} s^{-1}$	Bretscher (1989), Raub and Kuentzel (1989), Sczekan and Juliano (1990)
D_r	Receptor diffusivity	10^{-9} – $10^{-12} \frac{cm^2}{s}$	Jacobson et al. (1987), Duband et al. (1988b)
n_s	Substratum ligand density	10^7 – $10^{13} \frac{molecules}{cm^2}$	Goodman et al. (1989)
F_c	Force generated	10^{-2} – 10^{-6} dyn per compartment	Harris et al. (1980), James and Taylor (1969)
E	Elasticity	1 – $10^3 \frac{dyn}{cm^2}$	Sato et al. (1987), Zaner and Valberg (1989)
μ	Viscosity	10^2 – 10^3 poise	Bereiter-Hahn (1987)
k_{spring}	Bond spring constant	$10^{-1} \frac{dyn}{cm^2}$	Bell et al. (1984)
L	Cell length	25–100 μ	Trinkaus (1984)
W	Cell width	2–20 μ	Trinkaus (1984)
A_{body}	Cross-sectional area of cell body	1–50 μ^2	Trinkaus (1984)
t_c	Contraction time	$6 \cdot 10^3$ – $6 \cdot 10^3 s$	Trinkaus (1984), Chen (1981)
t_m	Movement cycle time	10^2 – $10^4 s$	Trinkaus (1984), Chen (1981)

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