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| Item | Value | Source |
| Surface area of PM (APM) | 78.5 μm2 | (Layton et al., 2011) |
| Surface area of vesicle (AV) | .031 μm2 | (Novick et al., 1980) |
| Doubling time (tdoubling) | 6000 s |  |
| Vesicles needed for growth | .42 /s | = (APM­ / AV) / tdoubling |
| Vesicles needed to counter endocytosis | .42 /s | (Layton et al., 2011) |
| Total exocytic vesicle rate | .84 /s |  |
| Arf1 density in COPI coat | 20,000 /μm2 | (Dodonova et al., 2015) |
| Arf1 proteins per vesicle | 620 | = density / area |
| Arf1 exocytosis rate | 520.8 /s | = protein count \* vesicle rate |
| Yeast cell volume | 65 μm3 | (Layton et al., 2011) |
| Arf1 activation rate | 13 μM/s | = exocytosis rate / cell volume |
| Sec7 molecules per cell | 243 | (Chong et al., 2015) |
| [Sec7] | 6.2 μM | = Sec7 count / NA / cell volume |
| Arf1 molecules per cell | 2065 | (Chong et al., 2015) |
| Fraction (mammalian) Arf1 GDP-bound | .66 | (Presley et al., 2002) |
| [Arf1-GDP] | 35 μM | = Arf1 count \* GDP-bound / NA / cell volume |
| Required rate constant | 60,000 /M/s | Arf1 activation rate = k \* [Sec7] \* [Arf1] |