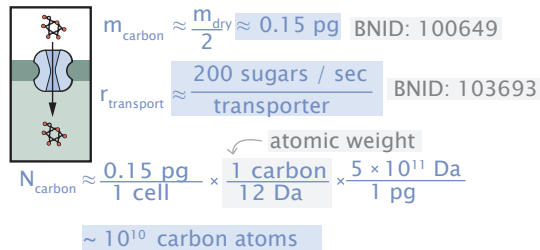


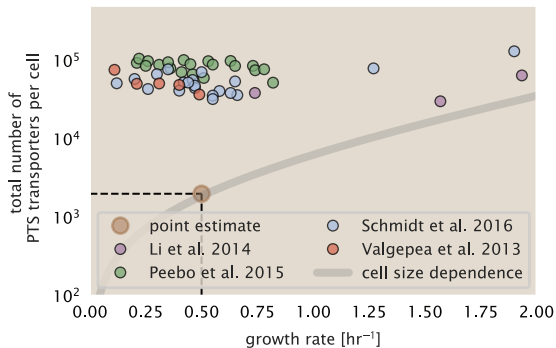
(A)

generic carbon transport



$$N_{\text{transporters}} \approx \frac{10^{10} \text{ C}}{\text{cell}} \times \frac{1 \text{ sugar}}{5 \text{ C}} \times \frac{\text{transporter}}{200 \text{ sugars/sec}} \times \frac{1 \text{ cell}}{5000 \text{ sec}}$$

$$\approx 2000 \text{ transporters}$$



(B)

specific carbon transport

