

Quiz 2 Material

Endomembrane System; ER (Protein Import); ER (Protein Folding); Intracellular Vesicle Transport; Golgi; Endocytosis & Lysosomes; Exocytosis

ER: Protein Import

majority of proteins encoded in nucleus,
synthesized in cytoplasm, then imported
into organelles

Isolation of Cell Organelles: Density Gradient Centrifugation

- get an equilibrium where cell density matches that of surrounding medium
- steps:
 1. Homogenization.
 2. Get rough & smooth microsomes.
 3. Put microsomes in a tube w/ increasing [sucrose] gradient.
 4. Centrifugation.
 5. Smooth microsomes have low density (closer to 5%) & rough microsomes have high density (closer to 30%).
- 5%-30% sucrose gradients
 - molecules sediment according to their size, shape, & density

