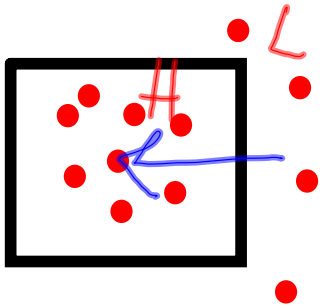
Sometimes things need to transported into the cell which might be against the concentration gradient.



Oct 17 - 2:01 PM

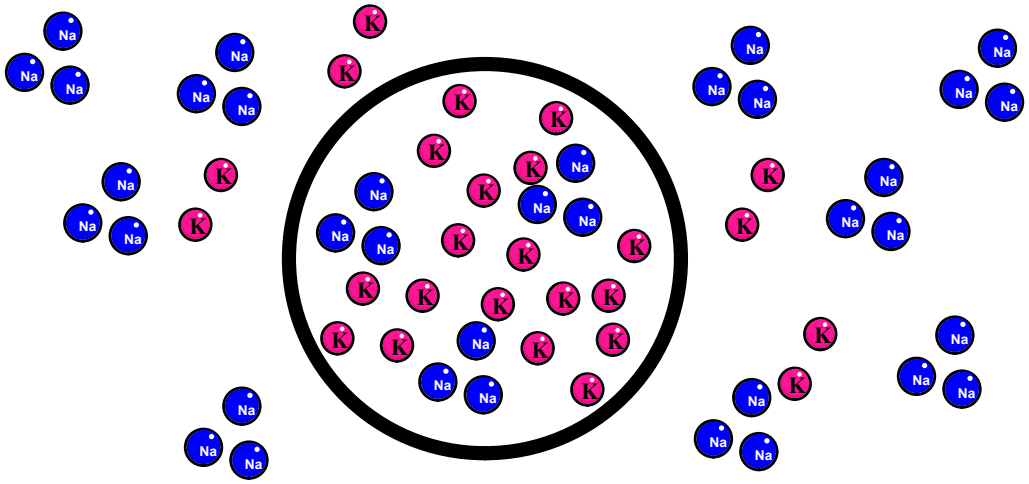
Transporting against the concentration gradient is called active transport.

This requires the cell to use ATP (energy)

Video Video

Oct 17 - 2:11 PM

Sodium-Potassium Pump



Oct 17 - 2:17 PM

The sodium-potassium pump does two things:

1. Prevents sodium from accumulating inside the cell. Sodium diffuses **into the cell.**

2. Maintains the sodium and potassium **gradients.**

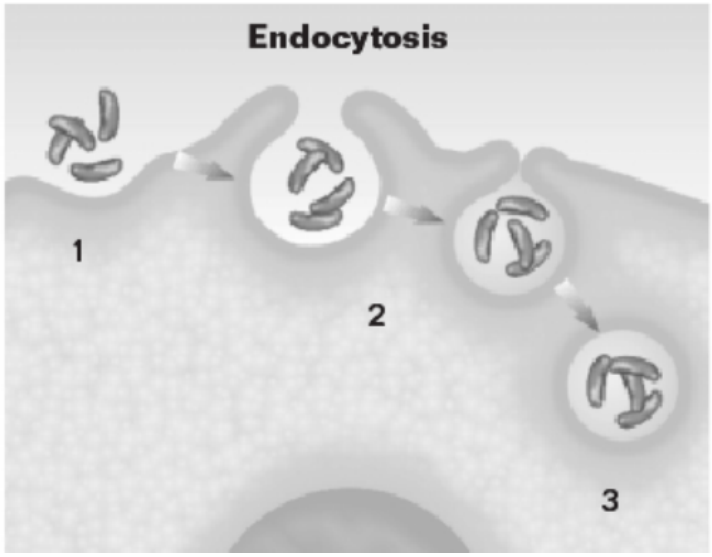
Oct 17 - 2:23 PM

Many substances are to large to be transported by carrier proteins.

Oct 17 - 2:26 PM

Endocytosis- movement of a substance into a cell by a vesicle.

Oct 17 - 2:31 PM



BIOSOURCES
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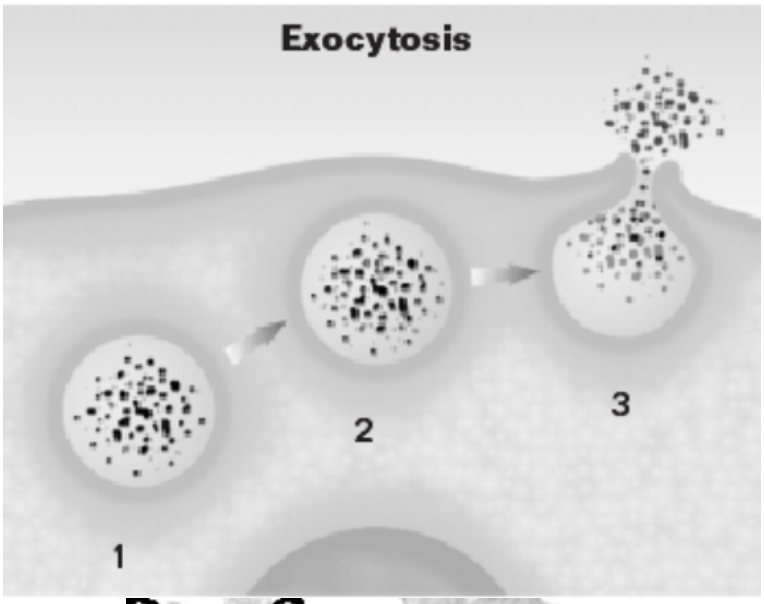
Exocytosis- movement **of a substance by a vesicle to the** out **of a cell**

Oct 17 - 2:32 PM



BIOSOURCES
TRANSPARENCY MASTER

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Receptor proteins do three things

1. Can change permeability making an ion channel stay open.

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2. It can make Second messengers that act as a signal molecule in the cytoplasm.

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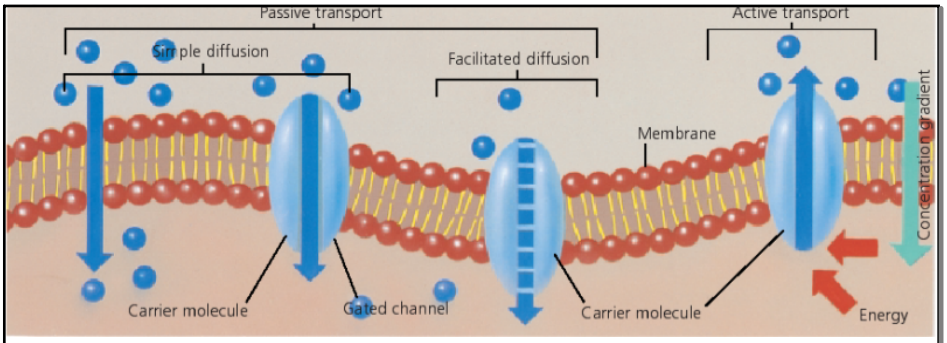
3. It can activate enzymes in cells or trigger other chemical reactions.

Oct 17 - 2:38 PM



BIOSOURCES
TEACHING TRANSPARENCIES

Video

Oct 18 - 8:29 AM

Oct 30-3:02 PM

Attachments

cell_trans_active_uptake.mov

cell_trans_active_protein_pump.mov

carrier_protein_g.mov