

**Cell Membrane only allows
select substances through.**

**That is called being semi -
permeable**

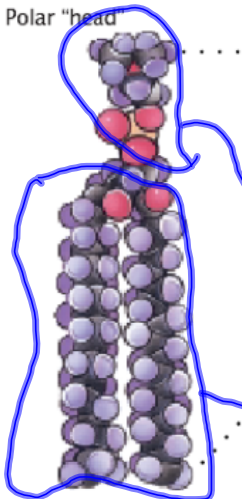
Strainer
filter

net
screen door

Sep 30 - 9:09 AM

**a This phospholipid
molecule . . .**

Polar "head"



Nonpolar "tails"

**This is a
phospholipid. It is
made up of a
phosphate group
and two fatty
acids.**

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a This phospholipid molecule . . .

Polar "head"

Nonpolar "tails"

b . . . is part of a lipid bilayer.

c The lipid bilayer forms the framework of the cell membrane.

The non-polar ends are both on the inside because the water repels them.

The diagram consists of three parts: (a) A single phospholipid molecule with a purple spherical polar head and two grey wavy nonpolar tails. (b) A cross-section of a lipid bilayer where the heads of one layer face the heads of the other, and tails face each other. (c) A full view of the lipid bilayer as a framework, with a red wavy line representing a protein embedded within it.

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d The lipid bilayer and its associated proteins make up the cell membrane.

Marker protein

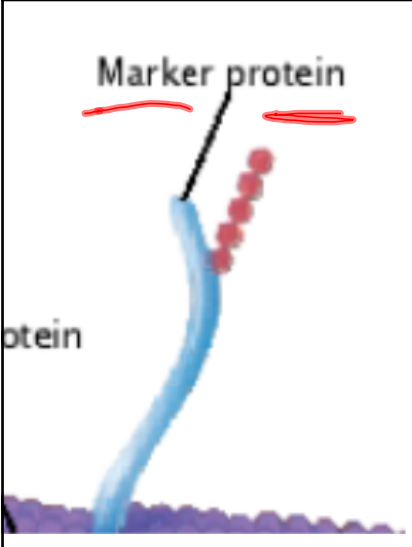
Channel protein

Receptor protein

The diagram shows a cross-section of a cell membrane. It features a purple lipid bilayer with several blue proteins embedded in it. A 'Marker protein' is shown on the surface with red dots. A 'Channel protein' is shown as a pore through the bilayer. A 'Receptor protein' is shown with a specific binding site. A yellow vertical bar is on the right side of the diagram.

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Marker protein

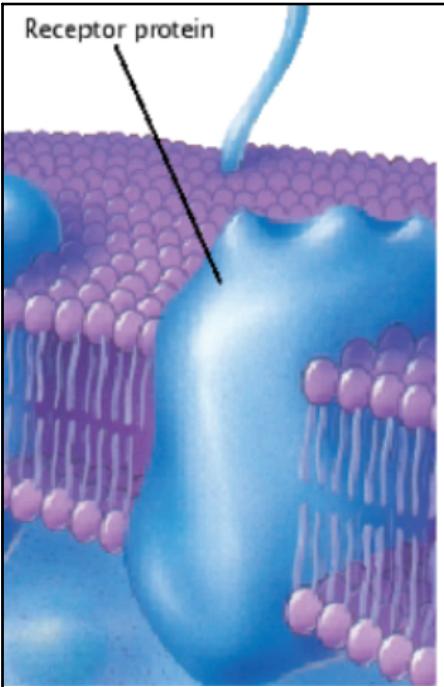
rotein

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Helps other cells recognize their cell type.

The diagram shows a blue, Y-shaped protein embedded in a purple phospholipid bilayer. A chain of red, spherical molecules is attached to the top of the protein. Two red horizontal lines are drawn above the protein, one on each side, indicating its width. The text 'Marker protein' is at the top with a black arrow pointing to the protein. The text 'rotein' is on the left side. The text 'HOLT BioSources / Teaching Transparencies' is at the bottom left.

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Receptor protein

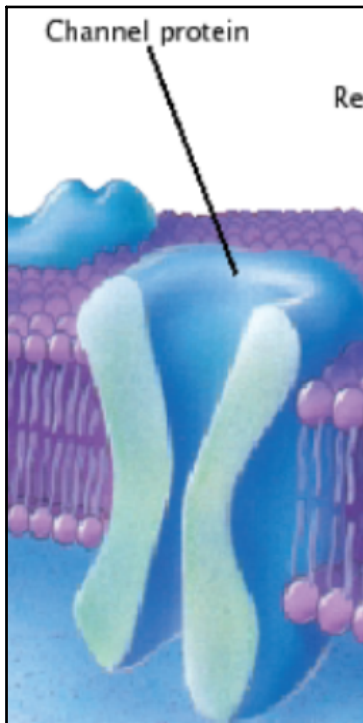
Receptor Protein

Recognize and bond to specific substances or signals.

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The diagram shows a blue, U-shaped protein embedded in a purple phospholipid bilayer. A blue, Y-shaped protein is shown above the membrane, with its top part entering the U-shaped protein. The text 'Receptor protein' is at the top left with a black arrow pointing to the protein. The text 'Receptor Protein' is written in red cursive on the right. The text 'Recognize and bond to specific substances or signals.' is written in blue bold on the right. The text 'HOLT BioSources / Teaching Transparencies' is at the bottom left.

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Channel Protein

Otherwise known as a transport protein helps the movement of substances into and out of the cell.

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