A sow has high levels of the hormone prolactin in her blood. This hormone stimulates milk production in her breast tissue, but has no effect on the cells in her liver. Why?

A  Liver cells lack the genes that code for milk proteins.
B  Liver cells lack prolactin receptors.
C  Prolactin cannot reach the liver.
D  The liver cannot translate the mRNA for milk proteins.

Only specific target cells have receptors that allow them to respond to a particular hormone.

Answer B.