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🌐 Active Absorption of Glucose in the Small Intestine

Biolprocess¹

¹na



SGD

ABSTRACT

This is the protocol for the active absorption of glucose from within the small intestine. This process allows for the absorption of glucose at low concentrations.

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Protocol status: Working

This protocol is working

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Active Absorption of Glucose in the Small Intestine

- 1 When the concentration gradient between the blood and the ileum is low, active methods may be used to absorb glucose into the blood

- 2 Co-transport proteins in the cell membranes of the cells lining the ileum
- 3 Sodium ions are actively pumped out of epithelial cells, into blood
- 4 Higher concentration of sodium ions in ileum than in epithelial cells
- 5 Sodium ions diffuse down the concentration gradient, into the epithelial cells, through a co-transport protein in the cell membrane
- 6 As sodium ions move into the cell, glucose molecules are coupled with them, carrying the glucose up the concentration gradient