

IIIrd Semester

Na⁺/K⁺ pump function

The sodium potassium pump is vital to numerous bodily processes, such as nerve cell signalling, heart contractions, kidney functions etc. The Na-K pump is a specialized type of transport protein found in the cell membranes. The cell membrane is the semipermeable outer barrier of many cells. The Na-K pump's job is to move potassium ions into the cell while simultaneously moving sodium ions out of the cell. Powered by ATP, the pump moves sodium and potassium ions in opposite directions, each against its concentration gradient. In a single cycle of the pump, three sod. ions are extruded from and two K ions are imported into the cell.