



The diagram illustrates the internal structure of a cell. The nucleus is the control center, containing genetic material. The cytoplasm is filled with various organelles that perform different functions. The cell membrane regulates the entry and exit of substances, while the cell wall provides structural support. The Golgi apparatus is involved in the transport and processing of proteins. The endoplasmic reticulum is responsible for the synthesis and transport of lipids and proteins. Mitochondria are the powerhouses of the cell, generating energy through cellular respiration.

FACTFILE



Feature	Eukaryotic Cell	Prokaryotic Cell
Nucleus	Present	Absent
Membrane-bound organelles	Present	Absent
Cell wall	Absent	Present
Size	Large	Small

This factfile compares the key differences between eukaryotic and prokaryotic cells. Eukaryotic cells are more complex, with a nucleus and various organelles, while prokaryotic cells are simpler and lack these structures. The presence of a cell wall and the size of the cell are also distinguishing factors.