

Llibres Entrez Medline/PubMed

Tutorial per buscar informació, a través del Medline, sobre la cèl·lula publicada en llibres.


Dr. Joan Ribera
Biologia Cel·lular
Facultat de Medicina de Lleida

<p>1 Connectar amb Entrez Medline/PubMed</p>	
<p>2 Un cop connectats apareix en pantalla la següent imatge</p>	
<p>3 Posar les paraules clau a la casella blanca (ATP-synthase)</p>	
<p>4 Després de fer un clic a Go</p>	
<p>5 apareix un llistat de llibres s'obre un llistat de llibres on hi trobareu la informació que busqueu . Feu un clic a l'escrit en blau 37 items de l'Alberts</p>	


5
 apareix un llistat de llocs del llibre que tracten aquest tema. Feu un clic a l'escrit en blau

- 1: [ATP Synthase Can Function in Reverse to Hydrolyze ATP and Pump H⁺](#)**
Molecular Biology of the Cell, 3rd edn. -> III. Internal Organization of the Cell -> 14. Energy Conversion: Mitochondria and Chloroplasts -> The Respiratory Chain and ATP Synthase
- 2: [All Bacteria Use Chemiosmotic Mechanisms to Harness Energy](#)**
Molecular Biology of the Cell, 3rd edn. -> III. Internal Organization of the Cell -> 14. Energy Conversion: Mitochondria and Chloroplasts -> The Respiratory Chain and ATP Synthase
- 3: [The Energy Stored in the Electrochemical Proton Gradient Is Used to Produce ATP and to Transport Metabolites and Inorganic Ions into the Matrix Space](#)**
Molecular Biology of the Cell, 3rd edn. -> III. Internal Organization of the Cell -> 14. Energy Conversion: Mitochondria and Chloroplasts -> The Mitochondrion
- 4: [An experiment demonstrating that the ATP synthase is driven by proton flow](#)**
Molecular Biology of the Cell, 3rd edn. -> III. Internal Organization of the Cell -> 14. Energy Conversion: Mitochondria and Chloroplasts -> The Respiratory Chain and ATP Synthase

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 S'obre el llibre que conté la informació, amb les pàgines i ítems corresponents.




MOLECULAR BIOLOGY OF THE CELL



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Molecular Biology of the Cell, 3rd edn. → Part III. Internal Organization of the Cell → **Chapter 14. Energy Conversion: Mitochondria and Chloroplasts**

The Respiratory Chain and ATP Synthase 11

Introduction

Having considered in general terms how mitochondria function, let us now look in more detail at the respiratory chain - the electron-transport chain that is so crucial to all oxidative metabolism. Most of the elements of the chain are intrinsic components of the inner mitochondrial membrane, and they provide some of the clearest examples of the many complicated interactions that can occur among the individual proteins located in a biological membrane.

Functional Inside-out Particles Can Be Isolated from Mitochondria 12

The respiratory chain is relatively inaccessible to experimental manipulation in intact mitochondria. By disrupting mitochondria with ultrasound, however, it is possible to isolate functional *submitochondrial particles*, which consist of broken cristae that have resealed into small closed vesicles about 100 nm in diameter (Figure 14-23). When these submitochondrial particles are examined in an electron microscope, their outside surfaces are seen to be studded with tiny spheres attached to the membrane by stalks (Figure 14-24). In intact mitochondria these lollipoplike structures are located on the *inner* (matrix) side of the inner membrane. Thus the submitochondrial particles are inside-out vesicles of inner membrane, with what was previously their matrix-facing surface exposed to the surrounding medium. As a result, they can readily be provided with the membrane-impermeable metabolites that would normally be present in the matrix

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[Chloroplasts and Photosynthesis](#)

[The Evolution of Electron-Transport Chains](#)

[The Genomes of Mitochondria and Chloroplasts](#)

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Figures

→ [Figure 14-23. Preparation of](#)

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 Feu un clic a les figures i apareixen

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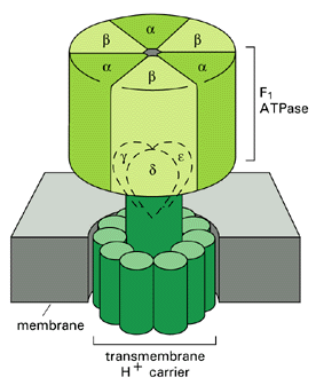


Figure 14-25. ATP synthase. As indicated, the F₁ATPase portion is formed from multiple subunits (*Greek letters*), as is the transmembrane H⁺ carrier.