

# ATP synthase Specific Activity Microplate Assay Kit ab109716

**9 References**   **8 图像**

### 概述

产品名称	ATP synthase Specific Activity Microplate Assay试剂盒
检测方法	Colorimetric
样品类型	Cell culture supernatant, Cell culture extracts, Tissue, Tissue Extracts, Cell Lysate
检测类型	Enzyme activity
种属反应性	<p><b>与反应:</b> Rat, Cow, Human</p> <p><b>不与反应:</b> Mouse</p>
产品概述	<p>ATP Synthase Activity Assay Kit ab109716 is used to determine both the activity and quantity of ATP synthase (Complex V) in a human or rat sample. The ratio of the two measurements represents the enzyme's specific activity.</p> <p>In the ATP synthase assay protocol, the ATP synthase enzyme is immunocaptured within the wells of a microplate. The conversion of ATP to ADP by ATP synthase is coupled to the oxidative reaction of NADH to NAD<sup>+</sup>. The formation of NAD<sup>+</sup> results in a decrease in absorbance at 340 nm which is proportional to the amount of enzyme activity.</p> <p>Subsequently, the quantity of ATP synthase is determined by adding an anti-ATP synthase antibody conjugated with alkaline phosphatase. Alkaline phosphatase acts on the substrate pNPP to form a yellow color (OD 405 nm) proportional to the amount of ATP synthase captured in the wells.</p> <p>ATP synthase assay protocol summary:</p> <ul style="list-style-type: none"> <li>- add samples to wells and incubate for 3 hrs to capture enzyme</li> <li>- wash</li> <li>- add lipid mix and incubate for 45 min</li> <li>- add reaction mix</li> <li>- analyze enzyme activity with microplate reader for 1-2 hrs at 1 min intervals</li> <li>- empty wells and incubate with solution A for 1 hr</li> <li>- wash</li> <li>- add solution B and incubate for 1 hr</li> <li>- wash</li> <li>- add development solution</li> <li>- analyze enzyme quantity with microplate reader for 30 min at 1 min intervals</li> </ul> <p>Store Buffer, Detergent, Detector Antibody, AP Label, AP Buffer, and the microplate at 4°C. Store</p>
说明	

the Reagent Mix, AP Development Reagent and Lipid Mix at -20°C. For multiple experiments, the Reagent Mix and AP Development Reagent may be aliquoted and stored at -20°C, or at -80°C for long term storage.

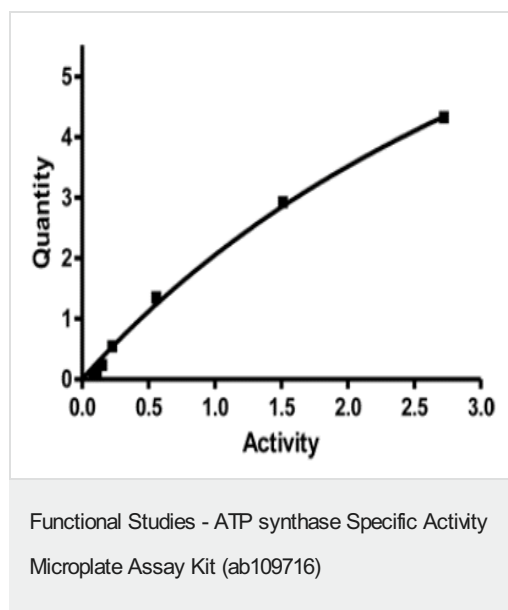
平台 Microplate reader

## 性能

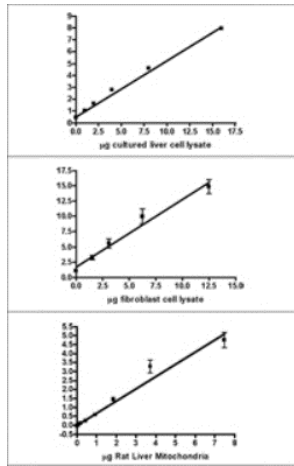
存放说明 Please refer to protocols.

组件	标识符	96 tests
AP ATP synthase Detector antibody		1 x 1ml
AP Buffer	Tube 2	1 x 20ml
AP Development Reagent		1 x 400µl
AP label 2500 X	Tube B	1 x 12µl
ATP synthase precoated Microtiter plate		1 unit
Buffer	Tube 1	1 x 15ml
Detergent		1 x 1ml
Phospholipids		1 x 6ml
Reagent Mix		1 x 20ml

## 图片

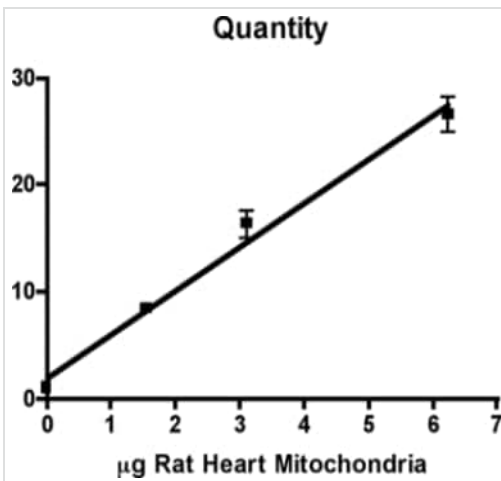


By measuring both quantity and activity of ATP synthase in a sample, the ratio of the two parameters can be calculated. This is the relative specific activity and should be compared to the normal or control.



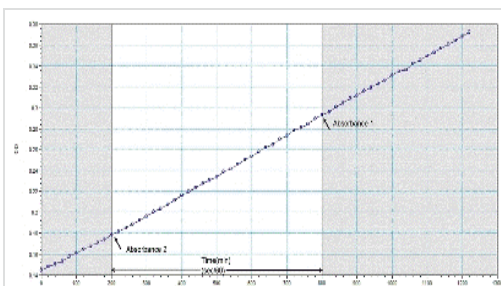
Examples of quantity/load relationships for cultured liver cell lysate, fibroblast lysate, and rat liver mitochondria.

Functional Studies - ATP synthase Specific Activity  
Microplate Assay Kit (ab109716)



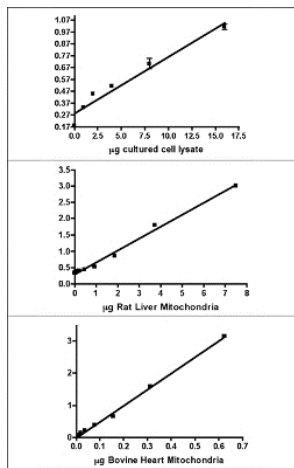
Functional study using ATP synthase Specific Activity Microplate Assay Kit (ab109716) measuring enzyme quantity.

Functional Studies - ATP synthase Specific Activity  
Microplate Assay Kit (ab109716)



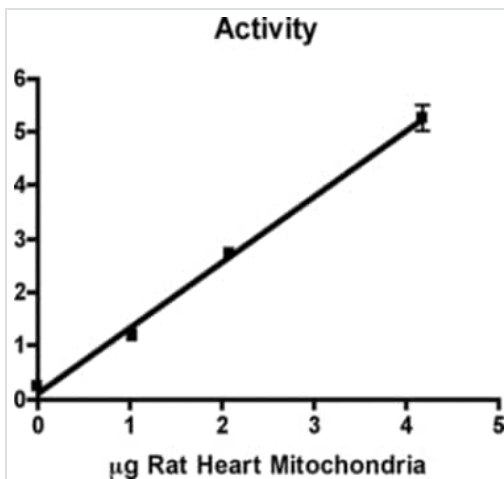
Functional study using ATP synthase Specific Activity Microplate Assay Kit (ab109716).

Functional Studies - ATP synthase Specific Activity  
Microplate Assay Kit (ab109716)



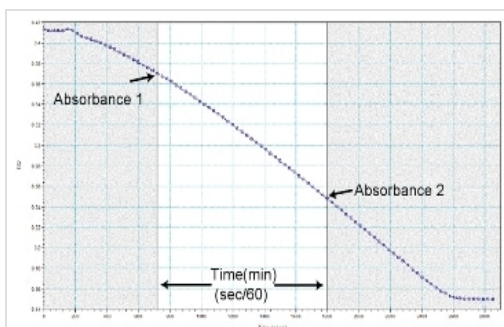
Examples of activity/load relationships for cultured cell lysate, rat liver mitochondria, and bovine heart mitochondria.

Functional Studies - ATP synthase Specific Activity  
Microplate Assay Kit (ab109716)



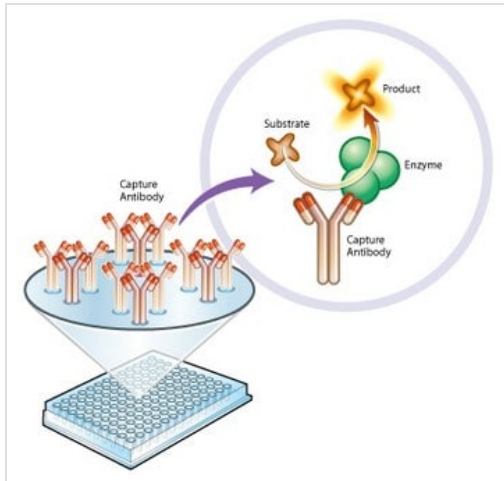
Functional study using ATP synthase Specific Activity Microplate Assay Kit (ab109716) measuring enzyme activity.

Functional Studies - ATP synthase Specific Activity  
Microplate Assay Kit (ab109716)



Functional study using ATP synthase Specific Activity Microplate Assay Kit (ab109716)

Functional Studies - ATP synthase Specific Activity  
Microplate Assay Kit (ab109716)



Principle of ATP synthase Specific Activity Microplate Assay Kit (ab109716).

Functional Studies - ATP synthase Specific Activity  
Microplate Assay Kit (ab109716)

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