abcam

Product datasheet

Complex II Enzyme Activity Microplate Assay Kit ab109908

★★★★★ 2 Abreviews 102 References 画像数 3

製品の概要

製品名 Complex II Enzyme Activity Microplate Assay Kit

検出方法 Colorimetric

サンプルの種類 Cell Lysate, Tissue Lysate, Purified mitochondria

アッセイタイプ Enzyme activity

全工程の試験時間 3h 00m

種交差性 交差種: Mouse, Rat, Cow, Human

製品の概要 Complex II Enzyme Activity Microplate Assay Kit is designed for determining the Complex II

activity in a human, mouse, rat or bovine sample. Each of the 96 wells in the kit has been coated with an anti-Complex II monoclonal antibody (mAb) which purifies the enzyme from a complex sample such as mitochondria, tissue homogenate or cell lysate. After this in-well purification the production of ubiquinol by the enzyme is coupled to the reduction of the dye DCPIP (2,6-

diclorophenolindophenol) and a decreases in its absorbance at 600 nm, which in turn recycles the

substrate ubiquinone.

特記事項 Succinate, Ubiquinone 2, DCPIP and Phospholipids should be stored at -80°C. All other

components should be stored at 4°C.

Related products

Review the <u>mitochondrial assay guide</u>, or the full <u>metabolism assay guide</u> to learn about more assays for metabolites, metabolic enzymes, mitochondrial function, and oxidative stress,

and also how to assay metabolic function in live cells using your plate reader.

試験プラットフォーム Microplate reader

製品の特性

保存方法 Please refer to protocols.

内容	96 tests
10X Blocking Solution	1 x 5ml
Detergent	2 x 1ml
20X Buffer	1 x 15ml

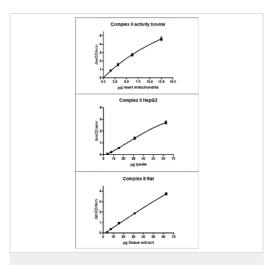
1

内容	96 tests
Complex II Activity Buffer	1 x 25ml
DCPIP/DCIP	1 x 250µl
Phospholipids	1 x 6ml
Pre-coated 96-well microplate (12 strips)	1 unit
Succinate	1 x 500µl
Ubiquinone 2	1 x 60µl

関連性

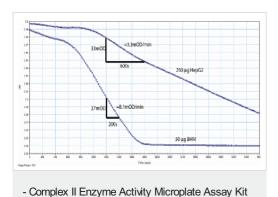
Complex II is also called succinate ubiquinone oxidoreductase or more commonly succinate dehydrogenase complex. This complex is composed of four nuclear encoded subunits and contains a flavin (FAD), non-heme iron centers and a b-type cytochrome as prosthetic groups. It is both a component of the electron transport chain and an enzyme of the Krebs cycle. Complex II deficiencies are seen in OXPHOS genetic disease and found in a type of cancer called paraganglioma.

画像



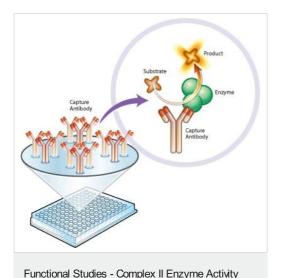
- Complex II Enzyme Activity Microplate Assay Kit (ab109908)

Figure 2. This assay is compatible with different sample types such as mitochondria, tissue or cell lysates and in multiple species including human and rodent samples. Typical linear range data are shown for ab109908.



(ab109908)

Figure 1. Example of raw data. Note the lag period before activity. Also note the activity of mitochondria (BHM, bovine heart mitochondria) is higher than whole cell lysate (HepG2, human hepatoblastoma) and the reaction ends at >1600 seconds because the substrates are used up.



Microplate Assay Kit (ab109908)

Abcam's enzyme activity assays apply a novel approach, whereby target enzymes are first immunocaptured from tissue or cell samples before subsequent functional analysis. All of our ELISA kits utilize highly validated monoclonal antibodies and proprietary buffers, which are able to capture even very large enzyme complexes in their fully-intact, functionally-active states.

Capture antibodies are pre-coated in the wells of premium Nunc MaxiSorp™ modular microplates, which can be broken into 8-well strips. After the target has been immobilized in the well, substrate is added, and enzyme activity is analyzed by measuring the change in absorbance of either the substrate or the product of the reaction (depending upon which enzyme is being analyzed). By analyzing the enzyme's activity in an isolated context, outside of the cell and free from any other variables, an accurate measurement of the enzyme's functional state can be understood.

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit https://www.abcam.co.jp/abpromise or contact our technical team.

Terms and conditions

•	Guarantee only valid for products bought direct from Abcam or one of our authorized distributors	