

MitoTox™ Complex II OXPHOS Activity Assay Kit ab109904

3 References [画像数 1](#)

製品の概要

製品名	MitoTox™ Complex II OXPHOS Activity Assay Kit
検出方法	Colorimetric
アッセイタイプ	Direct
全工程の試験時間	4h 00m
種交差性	交差種: Mouse, Cow, Human
製品の概要	<p>MitoTox™ Complex II OXPHOS Activity Assay Kit (ab109904) is designed for testing the direct inhibitory effect of compounds on Complex II activity in only 4 hours. Complex II extracted from the provided bovine heart mitochondria (a rich source of Complex II) is immunocaptured by specific antibodies on the plate. Complex II activity can be observed as decrease in absorbance at OD 600 nm. The intra-assay and inter-assay variation of this assay are both <15%.</p> <p>Inhibitory effects of compounds on Complex II activity can be tested in two different ways: 1. Screening format, where up to 23 compounds can be tested at a single concentration in triplicate; 2. Dose response (IC₅₀) format, where two compounds known to affect Complex II activity can be tested at 11 different data points in triplicate.</p> <p>Testing for mitochondrial function has become a key aspect of drug discovery. Mitochondria can be affected by drug treatment, resulting into cardio- and hepatotoxic side effects that can lead to drug withdrawal from the market. Therefore, there is increasing emphasis on testing the impact on mitochondria early on in the drug development process to reduce failure rates during preclinical and clinical phases.</p>
特記事項	<p>Please store Succinate, Ubiquinone 2, Bovine Heart Mitochondria, DCPIP at -80°C and all other components at 4°C.</p> <p>Related products</p> <p>Review the mitochondrial assay guide, or the full metabolism assay guide 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.</p>
試験プラットフォーム	Microplate reader

製品の特性

保存方法

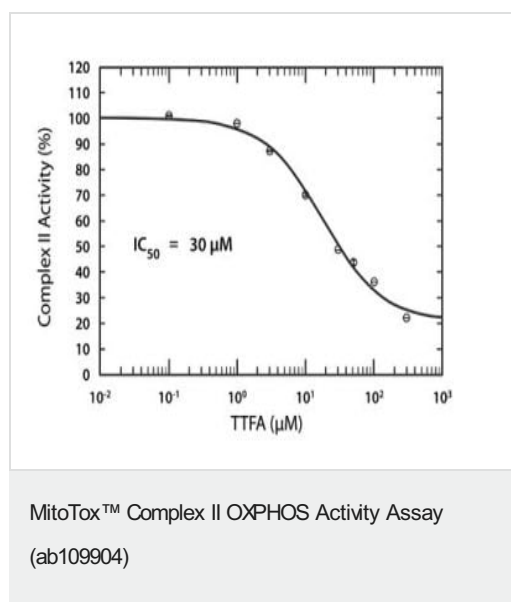
Please refer to protocols.

内容	96 tests
Detergent	1 x 1ml
12-channel reagent reservoirs	2 units
20X Buffer	1 x 5ml
Bovine heart mitochondria	2 x 360µl
Complex II Activity Buffer	1 x 25ml
DCPIP/DCIP	1 x 250µl
Pre-coated 96-well microplate	1 x 96 tests
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



Typical dose response curve for TTFA (2-thenoyltrifluoroacetone).

Assay was performed following the Dose Response Assay Procedure using TTFA, a well known Complex II inhibitor. TTFA was prepared in DMSO to generate a 100 mM stock. Starting with a 500 µM final concentration in well, 1:2 serial dilutions of TTFA were generated.

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