abcam

Product datasheet

NQO1 Activity Assay Kit ab184867

13 References 6 图像

概述

产品名称

检测方法 Colorimetric

精确度

批次内

样品	n	Mean	SD	CV%
Overall	3			2.183%

批次间

样品	n	Mean	SD	CV%
Overall	9			6.035%

样品类型

Cell culture extracts, Adherent cells, Suspension cells, Tissue Extracts, Cell Lysate, Tissue Homogenate, Tissue Lysate

检测类型

Enzyme activity

检测时间

0h 30m

种属反应性

与反应: Mouse, Rat, Cow, Human

NQO1 Activity Assay试剂盒

产**品概述**

NQO1 Activity Assay kit (ab184867) is designed for the sensitive and accurate measurement of $\,$

NQO1 (NAD(P)H dehydrogenase [quinone] 1) activity.

The enzyme activity is determined by following the reduction of Menadione with cofactor NADH and the simultaneous reduction of WST1 which leads to increased absorbance at 440 nm. Dicoumarol is used as an inhibitor of NQO1 as part of the assay.

NQO1 assay protocol summary:

- add samples to wells
- add reaction buffer + inhibitor and reaction buffer to separate sample wells
- analyze with a microplate reader for 5 min

说明

NQO1 serves as a quinone reductase in connection with conjugation reactions of hydroquinones involved in detoxification pathways, NQO1 protects against quinone-induced damage by competing with potentially toxic one-electron pathways. It also functions in biosynthetic processes such as the vitamin K-dependent gamma-carboxylation of glutamate residues in prothrombin

1

Microplate reader

性能

存放说明

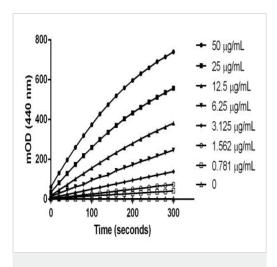
Store at -20°C. Please refer to protocols.

组 件	1 x 96 tests
1000X Cofactor (lyophilized)	1 vial
1000X Inhibitor (lyophilized)	1 vial
100X Dye (lyophilized)	1 vial
20X Basic Buffer	1 x 3ml
2X Extraction Buffer	1 x 15ml
5000X Menadione	1 x 100µl
500X NADH (lyophilized)	1 vial
96-well Microplate	2 units

细胞定位

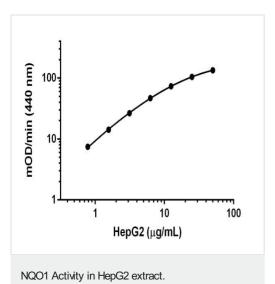
Cytoplasmic

图片

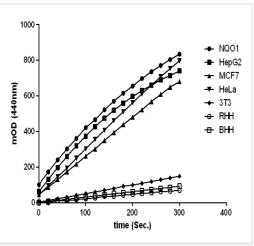


Raw data from various concentrations of HepG2 cell extracts.

An example is shown below where the rate/slope is calculated between these time points.



This raw data is expressed as rate (mOD/min) per microgram of cell extract added per well as shown above. The molar extinction coefficient factor for the WST1 dye is 25.9/mM/well.



Raw data of NQO1 activity from 50 $\mu g/mL$ of a series of normal samples.

Figure 3a

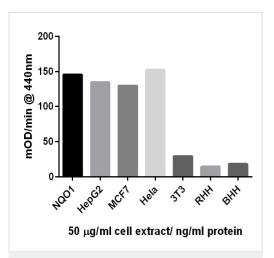


Figure 3b



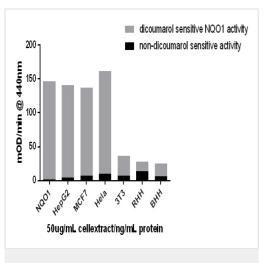
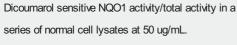


Figure 3c



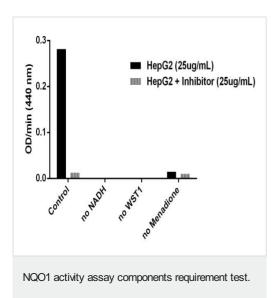


Figure 4

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