

Catalase Activity Assay Kit (Immunocapture) ab118184

9 References 画像数 5

医薬用外劇物

製品の概要

製品名

Catalase Activity Assay Kit (Immunocapture)

再現性

Intra-Assay (同時再現性)

サンプル	N	平均値	SD	CV%
1	8			7.1%

Inter-Assay (日差再現性)

サンプル	N	平均値	SD	CV%
1	4			9.9%

サンプルの種類

Cell culture extracts, Tissue Extracts

アッセイタイプ

Enzyme activity

検出範囲

1 µg/ml - 1000 µg/ml

全工程の試験時間

6h 00m

種交差性

交差種: Mouse, Rat, Human

製品の概要

Catalase Activity Assay Kit ab118184 is used to determine the relative specific activity (activity and quantity) of catalase in a sample. Capture antibodies specific for catalase are pre-coated in the microplate wells. The native enzyme is immunocaptured within the wells of the microplate; this removes all other enzymes.

The catalase assay buffer contains hydrogen peroxide which reacts with a substrate to make a luminescent product. Catalase functions rapidly to remove hydrogen peroxide from the solution and reduce the production of light. Therefore the light produced in each well is inversely proportional to the amount of catalase activity.

After catalase activity measurement the quantity of catalase is measured by adding an anti-catalase detector antibody to each well. After washing away unbound detector antibody, HRP-conjugated label specific for the detector antibody is pipetted to the wells. The wells are again washed, a TMB substrate solution is added to the wells and color develops in proportion to the amount of catalase bound. The developing blue color is measured at 600 nm. Optionally the reaction can be stopped by adding hydrochloric acid which changes the color from blue to yellow and the intensity can be

measured at 450 nm.

Catalase assay protocol summary:

- add samples to wells
- incubate for 3 hrs at room temp
- wash with wash buffer
- add activity solution and hydrogen peroxide solution
- analyze with luminescence microplate reader for 30 min
- wash
- add detector antibody and incubate for 1 hr at room temp
- wash
- add HRP label and incubate for 1 hr at room temp
- wash
- add HRP development solution and analyze with microplate reader for 15 min in kinetic mode

特記事項

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances.

It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

試験プラットフォーム

Microplate reader

製品の特性

保存方法

Store at +4°C. Please refer to protocols.

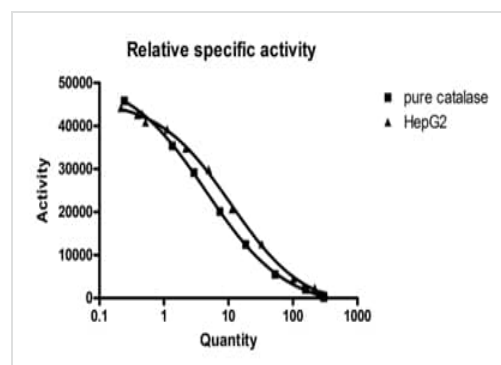
内容	1 x 96 tests
10X Blocking Solution	1 x 10ml
10X Detector Antibody	1 x 1.5ml
10X HRP Label	1 x 1.5ml
200X Luiminescent reagent	1 x 0.2ml
20X Buffer	1 x 20ml
55X Coupler	1 x 0.5ml
60X Hydrogen Peroxide	1 x 0.5ml
96-Well Microplate	1 unit
Base Buffer	1 x 24ml
Extraction Buffer (ab260490)	1 x 15ml
HRP Development Solution	1 x 12ml

機能

Occurs in almost all aerobically respiring organisms and serves to protect cells from the toxic

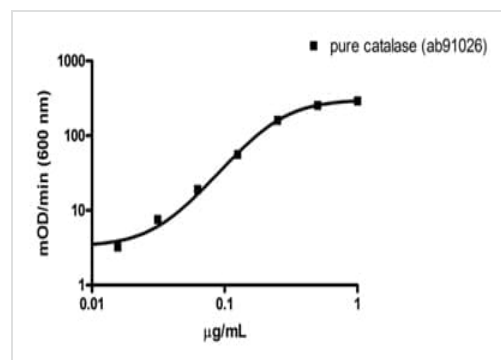
	effects of hydrogen peroxide. Promotes growth of cells including T-cells, B-cells, myeloid leukemia cells, melanoma cells, mastocytoma cells and normal and transformed fibroblast cells.
関連疾患	Defects in CAT are the cause of acatalasia (ACATLAS) [MIM:115500]; also known as acatalasemia. This disease is characterized by absence of catalase activity in red cells and is often associated with ulcerating oral lesions.
配列類似性	Belongs to the catalase family.
翻訳後修飾	The N-terminus is blocked.
細胞内局在	Peroxisome.

画像



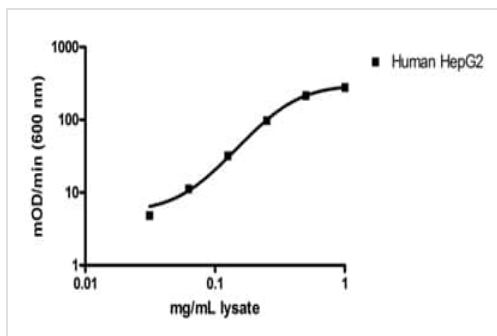
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Example relative specific activity – comparing the activity and quantity of purified erythrocyte catalase ([ab91026](#)) and catalase from human hepg2 lysate. The HepG2 sample is determined to have a higher specific activity rate.



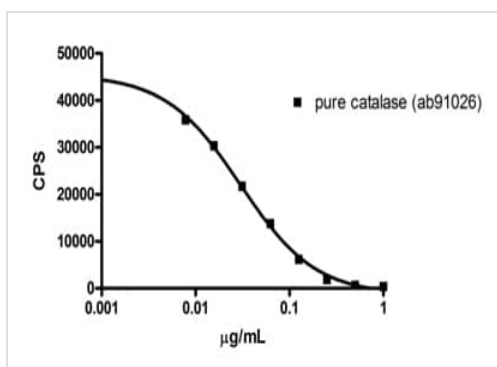
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Example standard curve for the purified human catalase sample [ab91026](#).



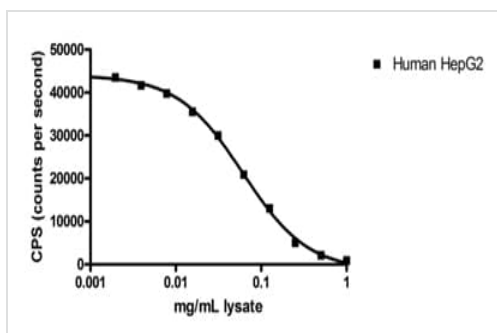
Example sample curves demonstrating the working range of the assay for a human and cultured cell line lysate (HepG2).

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Example standard curve for the purified human catalase sample **ab91026**.

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Example sample curves demonstrating the working range of the assay for a human and cultured cell line lysate (HepG2).

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