

Product datasheet

Ethanol Assay Kit ab65343

7 References 画像数 5

製品の概要

製品名	Ethanol Assay Kit
サンプルの種類	Cell culture supernatant, Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
アッセイタイプ	Quantitative
検出感度	> 10 nM
検出範囲	2 μM - 200 μM
全工程の試験時間	1h 00m

製品の概要

Abcam's Ethanol Assay Kit provides a simple, rapid, and sensitive method for accurate quantification of ethanol concentration in a variety of biological samples such as serum, plasma, other body fluids, foods, beverages and growth media. Alcohol oxidase oxidizes ethanol to generate H₂O₂ which reacts with our probe to generate color (λ_{max}= 570 nm) and fluorescence (Ex/Em = 535/587 nm). The kit detects 0.1-10 ppm alcohol (~10-800 nM). Visit our [FAQs page](#) for tips and troubleshooting.

PLEASE NOTE: Extreme care should be taken to ensure that no alcohol vapors (ethanol, methanol, propanol) are in the laboratory air where this assay is to be performed. Alcohol vapors in the air will be rapidly absorbed by kit components resulting in very high background making the kit unusable. Laboratories where HPLC equipment and solvents are standing or where alcohol is used to wipe down laboratory benches or equipment are inappropriate locations to perform this assay.

特記事項

Alcohol (ethanol C₂H₅OH) is among the most widely consumed drinks. Low doses of alcohol may help circulation while heavy alcohol consumption may lead to various forms of disease. Quantitative determination of alcohol finds applications in basic research, drug discovery, clinical studies and fermentation industry processes.

製品の特性

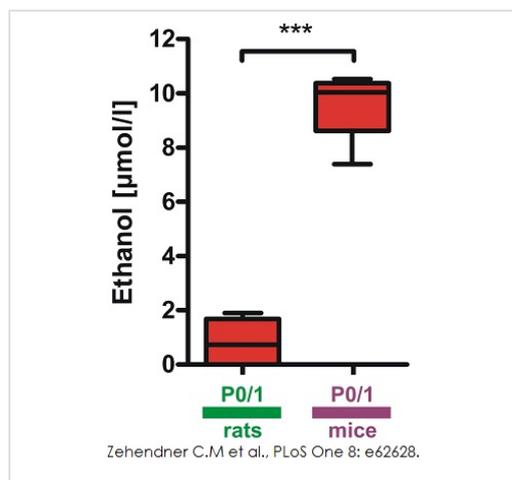
保存方法 Store at -20°C. Please refer to protocols.

内容	ラベル	100 tests
Ethanol Assay Buffer	WM	1 x 25ml
Ethanol Enzyme Mix	Green	1 vial

内容	ラベル	100 tests
Ethanol Probe (in DMSO, anhydrous)	Red	1 x 200µl
Ethanol Standard	Yellow	1 x 500µl

関連性 Alcohol (ethanol C₂H₅OH) is a clear colorless liquid rapidly absorbed from the gastrointestinal tract and distributed through the body. Ethanol has a depressive effect on the central nervous system and because of its psychoactive effects, it is considered a drug. Ethanol is metabolized by the body as an energy-providing carbohydrate nutrient, as it is metabolized into acetyl CoA, an intermediate common with glucose that can be used for energy in the citric acid cycle (TCA) or for biosynthesis. Ethanol within the human body is converted into acetaldehyde by alcohol dehydrogenase and then into acetic acid by acetaldehyde dehydrogenase. Acetaldehyde, the product of the first step of the alcohol breakdown, is linked to most of the toxic clinical effects of alcohol.

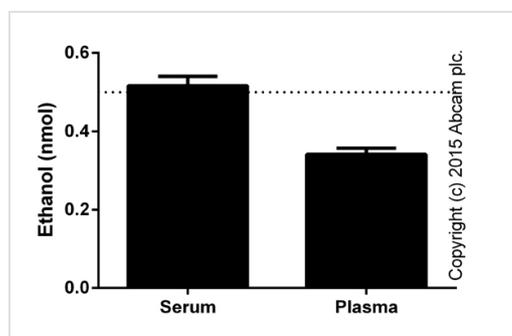
画像



Ethanol in blood plasma was analyzed using ethanol assay kit (ab65343). Ethanol concentrations were determined 60 minutes after urethane administration in P0/1 mice and rats.

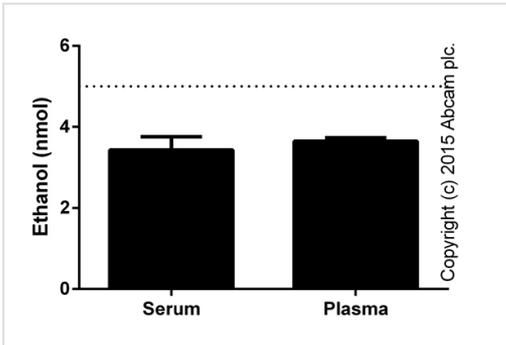
Functional studies - ab65343

Zehendner C.M et al., PLoS One 8(5), Fig 5. Doi: 10.1371/journal.pone.0062628



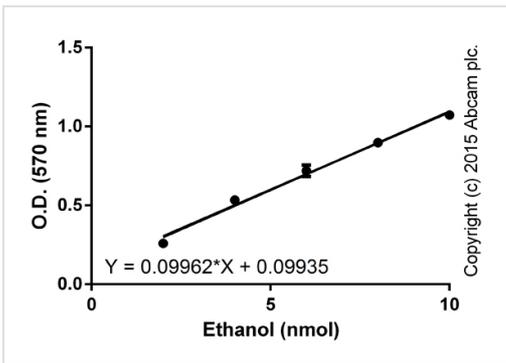
0.5 nmol of ethanol was added to diluted human biological fluids (1/10) and spiked samples were measured fluorimetrically (background subtracted, duplicates; +/- SD).

Functional Assay: ab65343 Ethanol Assay Kit



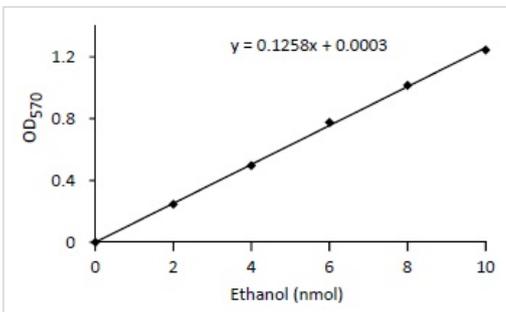
5 nmol of ethanol was added to diluted human biological fluids (1/10) and spiked samples were measured colourimetrically (background subtracted, duplicates; +/- SD).

Functional Assay: ab65343 Ethanol Assay Kit



Standard curves with background signal subtracted (duplicates; +/- SD).

Functional Assay: ab65343 Ethanol Assay Kit



Ethanol Standard Curve. Ethanol standard was diluted as described and the assay was performed according to the kit instructions.

Functional Studies - Ethanol Assay Kit (ab65343)

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