



Type in Product Names, Product Numbers, or CAS Numbers to see suggestions.



All Photos (1)

AA0100 ▶ Sigma-Aldrich

Ammonia Assay Kit

★★★★★ (0)

sufficient for 100 assays

NACRES: NA.84

Documents

↓ SDS

Q COO/COA

SKU	Pack Size	Availability	Price	Quantity	
AA0100-1KT	1 KIT	✔ Only 2 left in stock (more on the way) Details...	€427.00	<div>− +</div>	<div>i</div>

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RECOMMENDED PRODUCTS

Sigma-Aldrich

MAK310

Ammonia Assay Kit

sufficient for 200 fluorometric tests



Supelco

1.08024

Ammonium Test

colorimetric, 0.2-5 mg/L (NH₄⁺), for use with MQUANT®



PROPERTIES

usage	sufficient for 100 assays
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Quality Level	200
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storage temp.	2-8°C
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DESCRIPTION

Application

Ammonia concentration was measured in serum and urine using the Sigma Ammonia Assay Kit in a study assessing expression of renal ammonia transporters in response to chronic metabolic acidosis.

This kit is for the quantitative, enzymatic determination of ammonia in food and biological samples. Ammonia reacts with α -ketoglutaric acid (KGA) and reduced nicotinamide adenine dinucleotide phosphate (NADPH) in the presence of L-glutamate dehydrogenase (GIDH) to form L-glutamate and oxidized nicotinamide adenine dinucleotide phosphate (NADP⁺). The decrease in absorbance at 340 nm, due to the oxidation of NADPH, is proportional to the ammonia concentration. L-Glutamate dehydrogenase reacts specifically with ammonia. The Ammonia Assay Kit may be used to determine ammonia concentrations in the range of 0.2-15 $\mu\text{g/ml}$.

Kit Components Only

Product No.	Description
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	Ammonia Assay Reagent 10 vial(s)
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	L-Glutamate Dehydrogenase for Ammonia Assay 1 mL/vial
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	Ammonia Standard Solution 1 mL/vial
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SAFETY INFORMATION

Pictograms



GHS08

Signal Word

Danger

Hazard Statements

H319 - H334

Precautionary Statements

P261 - P264 - P280 - P284 - P305 +
P351 + P338 - P337 + P313

Hazard Classifications

Eye Irrit. 2 - Resp. Sens. 1

Storage Class Code

10 - Combustible liquids

WGK

WGK 3

Flash Point(F)

Not applicable

Flash Point(C)

Not applicable

DOCUMENTATION

Certificate of Analysis

Enter Lot Number to search for Certificate of Analysis (COA).

Lot Number

e.g. 023J5431

How to enter Lot Number (COA)

Search

Certificate of Origin

Enter Lot Number to search for Certificate of Origin (COO).

Lot Number

e.g. 023J5431

How to enter Lot Number (COO)

Search

CUSTOMERS ALSO VIEWED



Supelco

1.14428

Ammonium Test

for use with MQUANT®



Sigma-Aldrich

MAK004

Glutamate Assay Kit

sufficient for 100 colorimetric tests

[View Price and Availability](#)[View Price and Availability](#)

FREQUENTLY ASKED QUESTIONS

Which document(s) contains shelf-life or expiration date information for a given product?

If available for a given product, the recommended re-test date or the expiration date can be found on the Certificate of Analysis.

How do I get lot-specific information or a Certificate of Analysis?

The lot specific COA document can be found by entering the lot number above under the "Documents" section.

How can I assess the absorbance change of my reagent blank when using Product AA0100, Ammonia Assay Kit?

Generally, an absorbance change of 0.050 or less indicates an acceptable range for the reagent blank. An absorbance change higher than this indicates possible contamination of the reagent (or glassware) with ammonia.

Is there a control that can be used to assess the accuracy of Product AA0100, Ammonia Assay Kit?

A convenient control for use with this kit is the Ammonia Standard Solution that is provided in the kit.

Which samples should be deproteinized for use with Product AA0100, Ammonia Assay Kit?

The basis for this kit was a Diagnostic procedure for the determination of Ammonia in human plasma, whose total protein concentration is approximately 63 to 83 mg/mL. Thus, any solution whose protein concentration is less than approximately 83 mg/mL should not require deproteinization.

How do I find price and availability?

There are several ways to find pricing and availability for our products. Once you log onto our website, you will find the price and availability displayed on the product detail page. You can contact any of our Customer Sales and Service offices to receive a quote. USA customers: 1-800-325-3010 or view [local office numbers](#).

What is the Department of Transportation shipping information for this product?

Transportation information can be found in Section 14 of the product's (M)SDS. To access the shipping information for this material, use the link on the product detail page for the product.

My question is not addressed here, how can I contact Technical Service for assistance?

Ask a Scientist [here](#).

PEER REVIEWED PAPERS

Process intensification for the production of rituximab by an inducible CHO cell line.

Kahina Mellahi et al.

Bioprocess and biosystems engineering, 42(5), 711-725 (2019-01-24)

Mammalian-inducible expression systems are increasingly available and offer an attractive platform for the production of recombinant proteins. In this work, we have conducted process development for a cumate-inducible GS-CHO cell-line-expressing rituximab. To cope with the limitations encountered in batch when

Effects of chronic ammonia exposure on ammonia metabolism and excretion in marine medaka *Oryzias melastigma*.

Na Gao et al.

Fish & shellfish immunology, 65, 226-234 (2017-04-22)

Ammonia is highly toxic to aquatic organisms, but whether ammonia excretion or ammonia metabolism to less toxic compounds is the major strategy for detoxification in marine fish against chronic ammonia exposure is unclear to date. In this study, we investigated

Metabolomic Analysis Reveals Vitamin D-induced Decrease in Polyol Pathway and Subtle Modulation of Glycolysis in HEK293T Cells.

G C Santos et al.

Scientific reports, 7(1), 9510-9510 (2017-08-27)

We combined

TaAMT2;3a, a wheat AMT2-type ammonium transporter, facilitates the infection of stripe rust fungus on wheat.

Junpeng Jiang et al.

BMC plant biology, 19(1), 239-239 (2019-06-07)

Ammonium transporters (AMTs), a family of proteins transporting ammonium salt and its analogues, have been studied in many aspects. Although numerous studies have found that ammonium affects the interaction between plants and pathogens, the role of AMTs remains largely unknown

Bergmeyer, H.U., and Beutler, H-O.

Methods of Enzymatic Analysis, 454-461 (1985)

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PROTOCOLS AND ARTICLES

Articles

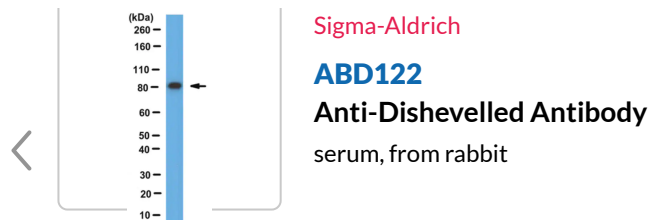
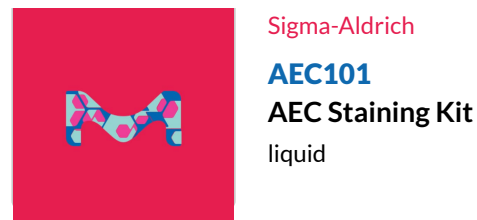
Glutamine Metabolism is Dysregulated in Many Cancer Cells

Sigma-Aldrich presents an article about how proliferatively active cells require both a source of carbon and of nitrogen for the synthesis of macromolecules. Although a large proportion of tumor cells utilize aerobic glycolysis and shunt metabolites away from mitochondrial oxidative phosphorylation, many tumor...

Fatty Acid Synthesis and Metabolism in Cancer Cells

Information on fatty acid synthesis and metabolism in cancer cells. Learn how proliferatively active cells require fatty acids for functions such as membrane generation, protein modification, and bioenergetic requirements. These fatty acids are derived either from dietary sources or are synthesized by the cell.

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