

Product datasheet

5'-Nucleotidase (CD73) Activity Assay Kit (Colorimetric) ab235945

[1 References](#) [2 Images](#)

Overview

| | |
|---------------------------|--|
| Product name | 5'-Nucleotidase (CD73) Activity Assay Kit (Colorimetric) |
| Detection method | Colorimetric |
| Sample type | Cell Lysate, Tissue Lysate |
| Assay type | Quantitative |
| Range | 2 nmol/well - 15 nmol/well |
| Species reactivity | |

Predicted to work with: Mammals 

Product overview

5'-Nucleotidase (CD73) Activity Assay Kit (Colorimetric) (ab235945) is a simple two-step end-point assay for the measurement of 5'-Nucleotidase activity in various tissues/cells. This assay relies on the Berthelot's test for quantification of ammonia.

In this assay, the action of 5'-nucleotidase on the substrate generates a product, which releases ammonia in presence of the converter. Developer I and II are then used to quantify the released ammonia through increase in absorbance at 670 nm.

This assay can detect as low as 0.2 mU of 5'-NT. Since non-specific enzymes like alkaline phosphatase can give a positive signal in this assay, 5'-NT inhibitor may be used to completely inhibit 5'-nucleotidase and distinguish from the signal from non-specific enzymes.

The assay kit also includes 5'- Nucleotidase (5'-NT) enzyme for use as positive control.

Notes

This product is manufactured by BioVision, an Abcam company and was previously called K992 5'-Nucleotidase Activity Assay Kit (Colorimetric). K992-100 is the same size as the 100 test size of ab235945.

Platform

Microplate reader

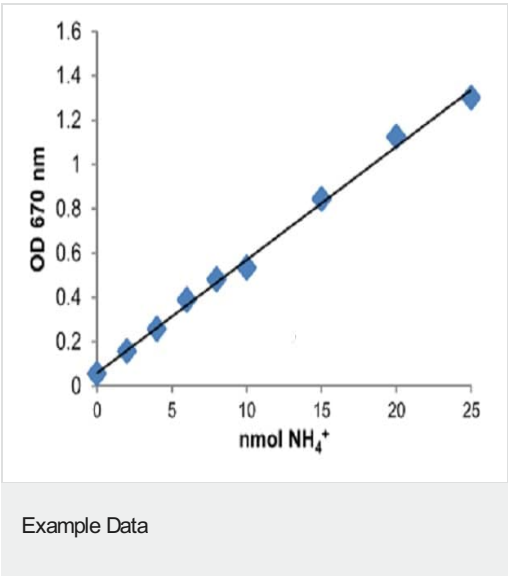
Properties

| | |
|-----------------------------|--|
| Storage instructions | Store at -20°C. Please refer to protocols. |
|-----------------------------|--|

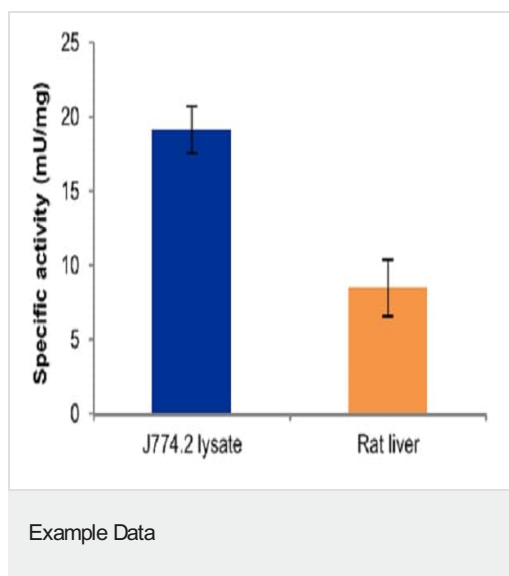
| Components | 100 tests |
|------------------------|-----------|
| 5'-NT Substrate | 1 vial |
| 5'-NT Buffer | 1 x 25ml |
| 5'NT Convertor | 1 vial |
| 5'-NT Inhibitor | 1 x 250µl |
| 5'-NT Positive Control | 1 vial |
| Ammonium Standard II | 1 x 100µl |
| EDTA Solution | 1 x 500µl |
| Reagent II | 1 x 8ml |
| Reagent III | 1 x 4ml |

| | |
|------------------------|--|
| Function | Hydrolyzes extracellular nucleotides into membrane permeable nucleosides. |
| Involvement in disease | Defects in NT5E are the cause of calcification of joints and arteries (CAJA) [MIM:211800]. A condition characterized by adult-onset calcification of the lower extremity arteries, including the iliac, femoral and tibial arteries, and hand and foot capsule joints. Age of onset has been reported as early as the second decade of life, usually involving intense joint pain or calcification in the hands. |
| Sequence similarities | Belongs to the 5'-nucleotidase family. |
| Cellular localization | Cell membrane. |

Images



NH₄⁺ standard curve.



5'-NT specific activity in J774.2 mouse macrophage (60 μ g protein) cell line lysate and rat liver tissue lysate (40 μ g protein).

Please note: All products are "FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC PROCEDURES"

Our Abpromise to you: Quality guaranteed and expert technical support

- Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <https://www.abcam.com/abpromise> or contact our technical team.

Terms and conditions

- Guarantee only valid for products bought direct from Abcam or one of our authorized distributors