

ADP Colorimetric/Fluorometric Assay Kit

Cat. No. GTX85594
Package
1 kit

PRODUCT

ADP is a product of ATP dephosphorylation and it can be rephosphorylated to ATP. De-phosphorylation and rephosphorylation occur via various phosphatases, phosphorylases and kinases. ADP is stored in platelets and can be released to interact with a variety of purinergic receptors. ADP levels regulate several enzymes involved in intermediary metabolism. ADP conversion to ATP primarily occurs within the mitochondrion and chloroplast although several such processes occur in the cytoplasm. Conventionally, ADP levels are measured by luciferase/luciferin mediated assays after ADP is converted to ATP. However, the luciferase system is unstable and luminescence equipment is not generally available in most laboratories. GeneTex's newly designed ADP Assay Kit provides a convenient colorimetric and fluorometric means to measure ADP level. In the assay, ADP is converted to ATP and pyruvate. The generated pyruvate can be quantified by colorimetric ($\lambda_{\text{max}} = 570 \text{ nm}$) or fluorometric method (Ex/Em 535/587 nm). The assay is simple, sensitive, stable and high-throughput adaptable. The assay can detect as low as $1 \mu\text{M}$ ADP in biological samples.

Summary

- Detection method- Colorimetric ($\lambda_{\text{max}} = 570 \text{ nm}$) or fluorometric (Ex/Em = 535/587 nm)
- Sample type- Cell and Tissue lysates, culture media, urine, plasma and serum, as well as many other biological fluids
- Species reactivity- Mammalian
- Kit size- 100 assays
- Applications- In the assay, ADP is converted to ATP and pyruvate. The assay can detect as low as $1 \mu\text{M}$ ADP in biological samples.

Features and Benefits

- Simple procedure; takes less than 1 hour
- Fast and convenient
- The assay is sensitive, stable and high-throughput adaptable.

Kit Contents:

ADP Assay Buffer
ADP Probe (lyophilized)
DMSO (anhydrous)
ADP Converter
ADP Developer Mix
ADP Standard ($1 \mu\text{mole}$ lyophilized)

Properties

Storage

Store at -20°C . Product has an expected shelf life of 12 months.

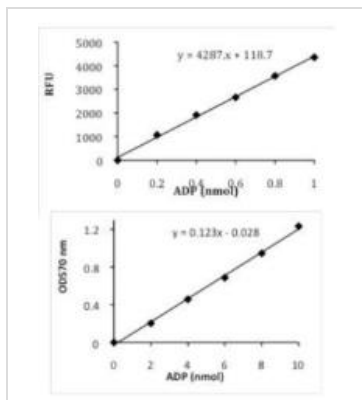
Note

For laboratory research use only. Not for any clinical, therapeutic, or diagnostic use in humans or animals. Not for animal or human consumption.

Purchasers shall not, and agree not to enable third parties to, analyze, copy, reverse engineer or otherwise attempt to determine the structure or sequence of the product.



For full product information, images and publications, please visit our [website](#).

DATA IMAGES

GTX85594 Image

Quantification of ADP concentration using fluorometric (top) or colorimetric (bottom) assay kit



For full product information, images and publications, please visit our [website](https://www.genetex.com).