

Phenylalanine Assay Kit ab83376

[3 Images](#)

Overview

Product name	Phenylalanine Assay Kit
Detection method	Fluorescent
Sample type	Urine, Serum, Plasma, Other biological fluids, Tissue Extracts
Assay type	Quantitative
Sensitivity	> 2 μ M
Range	2 μ M - 20 μ M
Assay time	1h 00m
Product overview	Phenylalanine Assay Kit ab83376 provides a quick, simple, accurate method for quantifying phenylalanine in biological samples.

In the phenylalanine assay protocol, phenylalanine is reductively deaminated with the simultaneous formation of NADH which reacts with our fluorescent probe to generate fluorescence at Ex/Em=535/587 nm. The assay is linear in the range from 0.1 to 1.0 nmol (2-20 μ M) of Phenylalanine.

Phenylalanine assay protocol summary:

- add samples and standards to wells
- add reaction mix and incubate for 60 min
- analyze with a microplate reader

Notes This product is manufactured by BioVision, an Abcam company and was previously called K572 Phenylalanine Fluorometric Assay Kit. K572-100 is the same size as the 100 test size of ab83376.

L-Phenylalanine (PHE) is an electrically-neutral amino acid, one of the twenty common and one of the three aromatic amino acids used to biochemically form proteins. Phenylalanine uses the same active transport channel as tryptophan to cross the blood-brain barrier, and, in large quantities, interferes with the production of serotonin.

Platform Microplate reader

Properties

Storage instructions

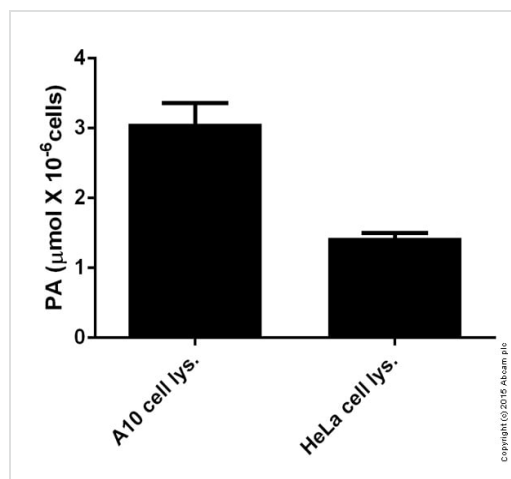
Store at -20°C. Please refer to protocols.

Components	100 tests
Phenylalanine Standard	1 vial
Fructose Assay Buffer	1 x 25ml
Phenylalanine Developer Mix	1 vial
Phenylalanine Enzyme Mix	1 vial
Tyrosinase	1 vial

Relevance

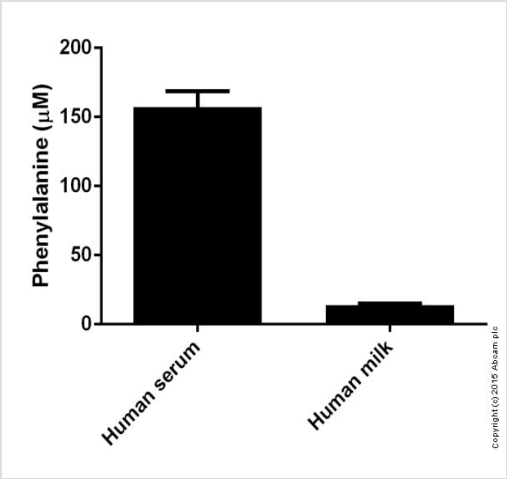
L-Phenylalanine (PHE) is an electrically-neutral amino acid, one of the twenty common and one of the three aromatic amino acids used to biochemically form proteins. Phenylalanine uses the same active transport channel as tryptophan to cross the blood-brain barrier, and, in large quantities, interferes with the production of serotonin. Errors in PHE metabolism lead to phenylketonuria or PKU which can have dire consequences.

Images



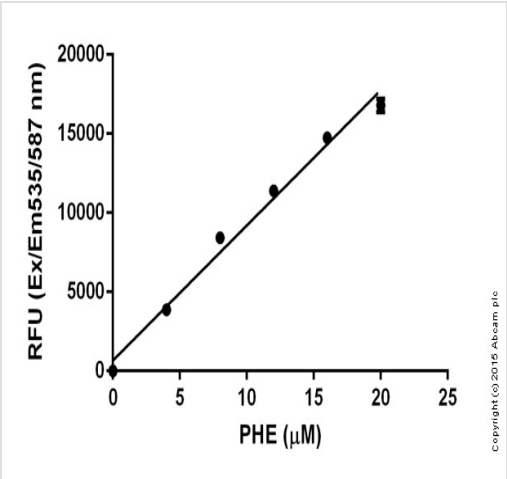
Phenylalanine measured in cell lysates showing quantities (micromoles) per million of cells tested.

OEM testing Phase VI ; Kits & Assays Initiative
Assay Testing Jan/Feb 2015



Phenylalanine measured in biofluids showing concentration in micromolar.

Functional assay - ab83376 Phenylalanine Assay Kit



Phenylalanine fluorimetric standard curve: mean of duplicates (+/- SD) with background readings subtracted

Functional assay - ab83376 Phenylalanine Assay Kit

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