

# $\beta$ Hydroxybutyrate (beta HB) Assay Kit (Fluorometric) ab180876

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### Overview

<b>Product name</b>	$\beta$ Hydroxybutyrate (beta HB) Assay Kit (Fluorometric)
<b>Detection method</b>	Fluorescent
<b>Sample type</b>	Milk, Urine, Serum, Plasma, Other biological fluids
<b>Assay type</b>	Quantitative
<b>Sensitivity</b>	< 4 $\mu$ M
<b>Species reactivity</b>	<b>Reacts with:</b> Mammals, Other species

**Product overview** Abcam's  $\beta$ -Hydroxybutyrate Assay Kit (Fluorometric) (ab180876) offers simplicity, enhanced sensitivity, and can be adapted to high-throughput applications. The assay is based on enzymatic oxidation of  $\beta$ -HB that results in generation of fluorescent signal (Ex/Em = 535/587 nm) which is directly proportional to the amount of  $\beta$ -HB. The kit offers an excellent alternative for measurement of  $\beta$ -HB when biological sample quantities are limited or subketogenic levels are suspected. The assay can detect  $\beta$ -Hydroxybutyrate as low as 4  $\mu$ M in a variety of biological samples.

**Notes** This product is manufactured by BioVision, an Abcam company and was previously called K651 PicoProbe™  $\beta$ -Hydroxybutyrate Fluorometric Assay Kit. K651-100 is the same size as the 100 test size of ab180876.

$\beta$ -Hydroxybutyrate ( $\beta$ -HB) is the most abundant of the ketone bodies (~78% of total ketone bodies in blood). Ketoacidosis (high concentrations of the ketone bodies) can be caused by a variety of conditions, such as diabetes, alcoholism and severe starvation. Ketoacidosis can be fatal if not treated. Additionally, ketogenic diets can increase the concentration of ketone bodies slightly in healthy individuals.

**Platform** Microplate reader

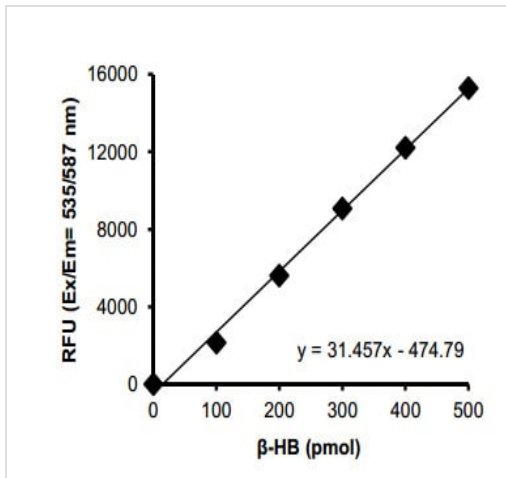
### Properties

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

Components	100 tests
$\beta$ -Hydroxybutyrate Assay Buffer	1 x 25ml

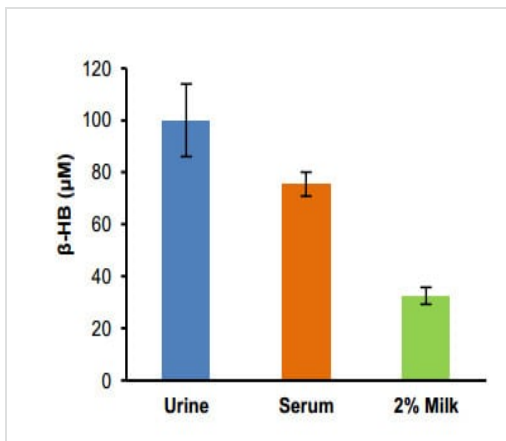
Components	100 tests
β-Hydroxybutyrate Enzyme Mix (Lyophilized)	1 vial
β-Hydroxybutyrate Standard (Lyophilized)	1 vial
β-Hydroxybutyrate Substrate Mix (Lyophilized)	1 vial
PicoProbe	1 x 400µl

## Images



β-Hydroxybutyrate Standard Curve. Assay performed using the kit protocol.

β-Hydroxybutyrate Standard Curve



Measurement of β-Hydroxybutyrate concentration in human urine (2.5 µL), serum (2.5 µL) & 2% Milk (5 µL). All samples were deproteinized using 10 kDa Spin Column & spiked with known amount of β-Hydroxybutyrate (400 pmol). Assays were performed following the kit protocol.

Measurement of β-Hydroxybutyrate concentration

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

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