abcam

Product datasheet

# Albumin (BCG) Assay Kit (Colorimetric) ab235628

3 References 3 Images

## Overview

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| **Product name** | Albumin (BCG) Assay Kit (Colorimetric) |
| **Detection method** | Colorimetric |
| **Sample type** | Serum |
| **Assay type** | Quantitative |
| **Sensitivity** | 5 µg |
| **Species reactivity** | **Reacts with:** Mammals |
| **Product overview** | Albumin (BCG) Assay Kit (Colorimetric) (ab235628) is a simple high-throughput assay that detects Albumin concentration in serum.<br><br>The assay is based on the selective interaction between Bromocresol Green (BCG) and albumin forming a chromophore that can be detected at 620 nm. The signal is directly proportional to the amount of albumin present in the serum. BCG does not react with other abundant plasma proteins like IgG.<br><br>The assay can detect as low as 5 µg (0.01 g/dL) of albumin in serum samples. |
| **Notes** | This product is manufactured by BioVision, an Abcam company and was previously called K554 Albumin (BCG) Assay Kit (Colorimetric). K554-100 is the same size as the 100 test size of ab235628.<br><br>Albumin is the most abundant protein in human blood and is highly conserved among vertebrates. It plays a pivotal physiological role in maintenance of plasma osmotic pressure, vascular permeability, and transport of cholesterol, bile pigments, nitric oxide, metals, and other small molecules in the body. It also functions as a free radical scavenger of reactive oxygen and nitrogen species, triggers cell signaling processes, possesses anti-inframmatory and coagulatory effects. |
| **Platform** | Microplate reader |

## Properties

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

| Components | 100 tests |
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| Albumin Assay Buffer | 1 x 25ml |
| Bromocresol Green | 1 x 100µl |
| BSA Standard I | 1 x 0.5ml |

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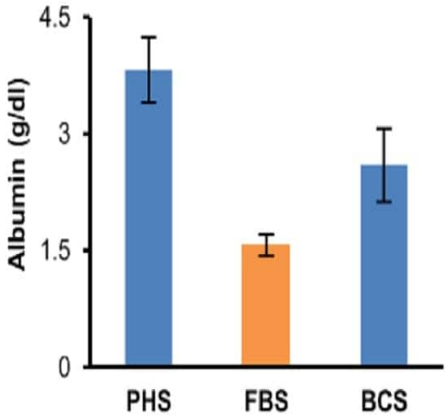
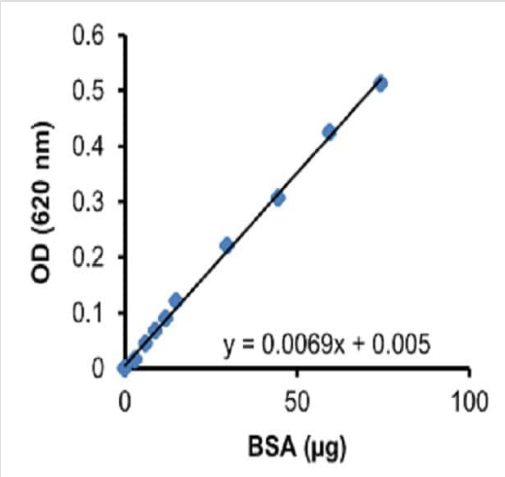
| **Function** | Serum albumin, the main protein of plasma, has a good binding capacity for water, Ca(2+), Na(+), K(+), fatty acids, hormones, bilirubin and drugs. Its main function is the regulation of the colloidal osmotic pressure of blood. Major zinc transporter in plasma, typically binds about 80% of all plasma zinc. |
| **Tissue specificity** | Plasma. |
| **Involvement in disease** | Defects in ALB are a cause of familial dysalbuminemic hyperthyroxinemia (FDH) [MIM:103600]. FDH is a form of euthyroid hyperthyroxinemia that is due to increased affinity of ALB for T(4). It is the most common cause of inherited euthyroid hyperthyroxinemia in Caucasian population. |
| **Sequence similarities** | Belongs to the ALB/AFP/VDB family.<br>Contains 3 albumin domains. |
| **Post-translational modifications** | Kenitra variant is partially O-glycosylated at Thr-620. It has two new disulfide bonds Cys-600 to Cys-602 and Cys-601 to Cys-606.<br>Glycated in diabetic patients.<br>Phosphorylation sites are present in the extracelllular medium.<br>Acetylated on Lys-223 by acetylsalicylic acid. |
| **Cellular localization** | Secreted. |

## Images



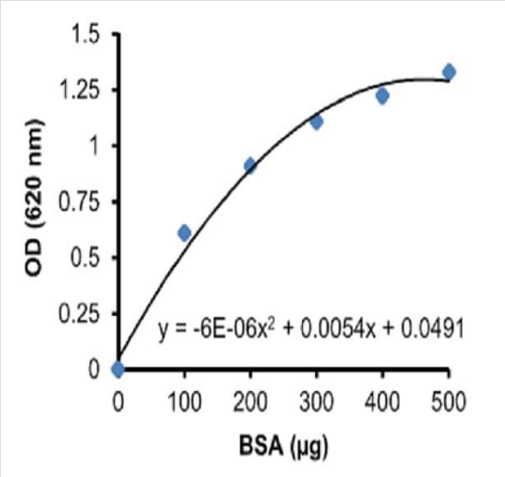

Albumin concentration in pooled human serum (PHS), fetal bovine serum (FBS) and bovine calf serum (BCS).

Sample volumes (0-20 µL) were assayed following the kit protocol.
Albumin concentration (g/dL): PHS: 3.8 ± 0.4; FBS: 1.6 ± 0.1; BCS: 2.6 ± 0.5.




BSA Standard Curve (0-75 µg).

Example Data




BSA Standard Curve (0-500 µg).

Example Data

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