

Datasheet for ABIN1000254

BCG Albumin Assay Kit

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Publications



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Specificity:

Quantity:	250 tests	
Target:	BCG Albumin	
Application:	Biochemical Assay (BCA)	
Product Details		
Sample Type:	Plasma, Serum, Urine	

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Characteristics:	Sensitive and accurate. Use as little as 5 μ L samples. Detection range 0.01 g/dL (1.5 μ M) to 5
	g/dL (750μM) albumin in 96-well plate assay.

Simple and high-throughput. The procedure involves addition of a single working reagent and incubation for 5 min. Can be readily automated as a high-throughput assay in 96-well plates for

thousands of samples per day.

 $0.01 \, a/dl$

Improved reagent stability and versatility. The optimized formulation has greatly enhanced reagent and signal stability. Cuvet or 96-well plate assay.

No interference in biological samples.

No pretreatments are needed. Assays can be directly performed on raw biological samples i.e., in the presence of lipid and protein.

Components: Reagent: 50 mL. Albumin Standard: 1 mL 5 g/dL BSA.

Material not included: Pipeting devices and accessories (e.g. 5 µL). Clear bottom 96-well plates (e.g. Corning Costar)

and plate reader. Spectrophotometer and cuvets for measuring OD at 620nm.

Target Details

Target:	BCG Albumin		
Background:	Quantitative determination of albumin by bromcresol green BCG method at 620nm.		
	Procedure: 5 min.		
	Albumin is the most abundant plasma protein in human. It accounts for about 60% of the total		
	serum protein. Albumin plays important physiological roles, including maintenance of colloid		
	osmotic pressure, binding of key substances such as long-chain fatty acids, bile acids, bilirubir		
	haematin, calcium and magnesium. It has anti-oxidant and anticoagulant effects, and also act		
	as a carrier for nutritional factors and drugs, as an effective plasma pH buffer. Serum albumin		
	is a reliable prognostic indicator for morbidity and mortality, liver disease, nephritic syndrome,		
	malnutrition and protein-losing enteropathies. High levels are associated with dehydration.		
	Simple, direct and automation-ready procedures for measuring albumin concentration in		
	biological samples are becoming popular in Research and Drug Discovery. This BCG albumin		
	assay kit is designed to measure albumin directly in biological samples without any		
	pretreatment. The improved method utilizes bromcresol green that forms a colored complex		
	specifically with albumin. The intensity of the color, measured at 620nm, is directly proportional		
	to the albumin concentration in the sample. The optimized formulation substantially reduces		
	interference by substances in the raw samples.		
Application Details			
Application Notes:	Direct Assays: albumin in serum, plasma, urine, biological preparations.		
	Drug discovery/Pharmacology: effects of drugs on albumin metabolism.		
Protocol:	Procedure using 96-well plate:		
	1. Dilute standards in distilled water. Dilute serum and plasma samples 2 fold. Transfer 5 μ L		
	diluted standards and diluted samples to wells of a clear bottom plate. Store diluted standards		
	at -20°C for future use.		
	at -20°C for future use. 2. Add 200 μL working reagent and tap lightly to mix. Avoid bubble.		
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	 Add 200 μL working reagent and tap lightly to mix. Avoid bubble. Incubate 5 min at room temperature and read optical density at 570- 670nm (peak absorbance at 620nm). 		
	 2. Add 200 μL working reagent and tap lightly to mix. Avoid bubble. 3. Incubate 5 min at room temperature and read optical density at 570- 670nm (peak absorbance at 620nm). Procedure using cuvette: 		

the OD for standard, dilute samples with distilled water and repeat the assay.

Application Details

Reagent Preparation:	Important: bring reagent to room temperature before use.
Calculation of Results:	Subtract blank OD (water, #8) from the standard OD values and plot the OD against standard concentrations. Use the standard curve to determine the sample albumin concentration. Conversions: 0.1 g/dL albumin equals $15 \mu M$, 0.1% or $1000 ppm$.
Restrictions:	For Research Use only
Handling	
Storage:	4 °C
Publications	

Product cited in:

Doi, Rekha, Ahmed, Okada, Roy, El Arifeen, Ekström, Raqib, Wagatsuma: "Association between calcium in cord blood and newborn size in Bangladesh." in: **The British journal of nutrition**, Vol. 106, Issue 9, pp. 1398-407, (2011) (PubMed).

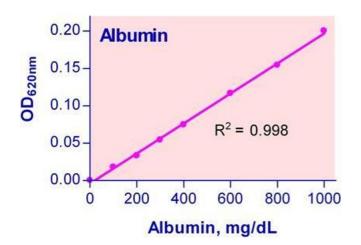
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Irani, Pomerantseva, Hart, Sundback, Neville, Vacanti: "Mechanical dissociation of swine liver to produce organoid units for tissue engineering and in vitro disease modeling." in: **Artificial organs**, Vol. 34, Issue 1, pp. 75-8, (2010) (PubMed).

Zhang, Thomas, Marshall, Kernan, Su, Zheng, Takano, Saido, Eddy: "Nicotinic acetylcholine receptor α1 promotes calpain-1 activation and macrophage inflammation in hypercholesterolemic nephropathy." in: **Laboratory investigation, a journal of technical methods and pathology**, Vol. 91, Issue 1, pp. 106-23, (2010) (PubMed).

Roberts, Goralski, Renton, Julien, Webber, Sleno, Volmer, Hall: "Effect of acute inflammatory brain injury on accumulation of morphine and morphine 3- and 6-glucuronide in the human brain." in: **Critical care medicine**, Vol. 37, Issue 10, pp. 2767-74, (2009) (PubMed).

There are more publications referencing this product on: Product page



Biochemical Assay

Image 1.