

ELISA for Quantitative Determination of Bovine Albumin (BSA)

Introduction

The CellTrend ALBUMIN(bovine)-ELISA is designed for the quantitative determination of bovine albumin in complex samples. Main application of the assay is to monitor purification of protein preparations (e.g. monoclonal antibodies) if bovine or calf serum albumin has been used in the production process.

This ELISA furthermore allows quantification of albumin in bovine urine to estimate kidney function. When blood is filtered in glomeruli of kidneys, highly molecular substances are held back. Therefore, urine is nearly protein free. In case of kidney damages, small proteins like albumin appear in urine. Albumin therefore serves as a marker in monitoring kidney damages.

Principle of the Assay

The determination of albumin is carried out as direct competitive ELISA. Bovine albumin has been precoated onto a microplate. During incubation the binding of an enzyme-linked anti-albumin(bovine)-antibody to the wells is inhibited by albumin from samples/standards. After washing away any unbound antibody, a substrate solution is added to the wells and color develops in proportion to the amount of antibody conjugate. The absorption at 450 nm is reverse proportional to the albumin concentration.

Performance Characteristics

Standard curve:

7 standards between 10 ng/ml and 40960 ng/ml

Sensitivity:

50 ng/ml (sample dilution 1:5)

Sample materials:

Protein preparations, bovine urine

Intraassay precision (CV):

(n=10)

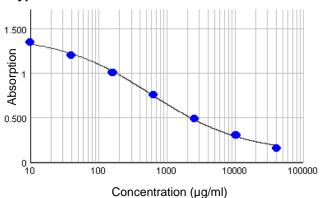
at 2529 ng/ml: 5.1% at 875 ng/ml: 8.8% at 39 ng/ml: 10.7%

Recovery: 106.6%

Cross reactivities:

Albumin (human) <0.1% Albumin (mouse) <0.1%

Typical Standard Curve



For Research use only

Assay Procedure

Incubation of samples/standards with antibody conjugate	50 μl + 50 μl/well	2 hrs, room temperature
Wash		
Substrate incubation	100 µl/well	20 min, room temperature
Add stop solution	100 µl/well	
Read at 450 nm		

Order informations

Product	Catalog number	Price (€)
ELISA for Quantitative Determination of BSA, 1x96 determinations	50300	490
Contract analysis: Determination of BSA		please inquire

Related products

Product	Catalog number	Price (€)
ELISA for Determination of Albumin (Rat), 1x96 determinations	50100-1	490
ELISA for Determination of Albumin (Mouse), 1x96 determinations	50200-1	490
Contract analysis: Determination of Albumin in Rat/Mouse Urine		please inquire

CellTrend GmbH, Im Biotechnologiepark 3 (TGZII), D-14943 Luckenwalde, email: <u>info@celltrend.de</u> Phone: +49 (0)3371 / 61 99 600, FAX: +49 (0)3371 / 61 99 604 Version: 08/2018