# abcam

# Product datasheet

# Human Betacellulin ELISA Kit ab189575

人Betacellulin ELISA试剂盒

SimpleStep ELISA

2 References 5 图像

概述

产品名称

Colorimetric

检测方法

精确度

批次内

样品	n	Mean	SD	CV%
Serum	5			3%

批次间

样品	n	Mean	SD	CV%
Serum	3			5%

样**品**类型 Cell culture supernatant, Milk, Serum, Hep Plasma, EDTA Plasma, Cit plasma

检测类型 Sandwich (quantitative)

**灵敏度** 15 pg/ml

**范围** 31.3 pg/ml - 2000 pg/ml

回收率

特定样本回收率

样品类型	平均%	范围
Milk	83	82% - 85%
Serum	104	103% - 106%
Tissue Culture Media	101	99% - 103%
Hep Plasma	99	98% - 101%
EDTA Plasma	90	87% - 92%
Cit plasma	94	91% - 100%

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**检测时间** 1h 30m

实验**步**骤 One step assay

种属反应性 与反应: Human

产**品概述** Human Betag

Human Betacellulin ELISA Kit (ab189575) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Betacellulin protein in hep plasma, milk, serum, cit plasma, cell culture supernatant, and edta plasma. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Betacellulin with 15 pg/ml sensitivity.

SimpleStep ELISA® technology employs capture antibodies conjugated to an affinity tag that is recognized by the monoclonal antibody used to coat our SimpleStep ELISA® plates. This approach to sandwich ELISA allows the formation of the antibody-analyte sandwich complex in a single step, significantly reducing assay time. See the SimpleStep ELISA® protocol summary in the image section for further details. Our SimpleStep ELISA® technology provides several benefits:

- Single-wash protocol reduces assay time to 90 minutes or less
- High sensitivity, specificity and reproducibility from superior antibodies
- Fully validated in biological samples
- 96-wells plate breakable into 12 x 8 wells strips

A 384-well SimpleStep ELISA® microplate (<u>ab203359</u>) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Betacellulin (BTC) is an EGF growth factor family member that binds to EGF Receptor family members. BTC is expressed as an 178 amino acid precursor form that is a single-pass transmembrane protein (this form is called probetacellulin). Subsequent cleavage produces the soluble and secreted 80 amino acid betacellulin fragment from the extracellular portion of probetacellulin. This assay reacts with the soluble betacellulin protein. There is high BTC protein sequence similarity among mammals.

平台 Microplate

#### 性能

说明

#### 存放说明

#### Store at +4°C. Please refer to protocols.

组 <b>件</b>	1 x 96 tests
10X Human BTC Capture Antibody	1 x 600µl
10X Human BTC Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human BTC Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit

组 <b>件</b>	1 x 96 tests
Sample Diluent NS (ab193972)	1 x 50ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

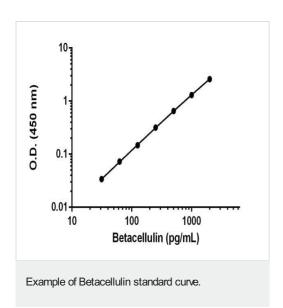
## 相关性

The protein encoded by this gene is a member of the mammalian members of the EGF family of growth factors. It is synthesized primarily as a transmembrane precursor, which is then processed to mature molecule by proteolytic events. This encoded protein is a ligand for the EGF receptor. Several alternatively spliced transcript variants of this gene have been described, but the full-length nature of some of these variants has not been determined.

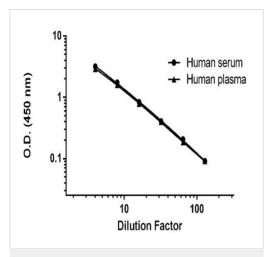
### 细胞定位

 $\label{lem:continuous} \textbf{Cell Membrane and Secreted; extracellular space.}$ 

### 图片

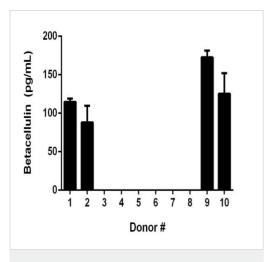


Background-subtracted data values (mean +/- SD) are graphed.



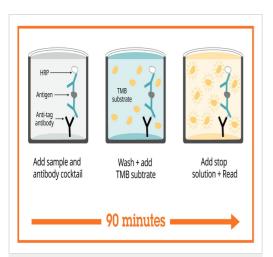
Titration of BTC spiked into Human serum and plasma (citrate) diluted 4-fold to 128-fold in Sample Diluent NS.

Background-subtracted data values (mean  $\pm$ -SD, n = 2) are graphed.



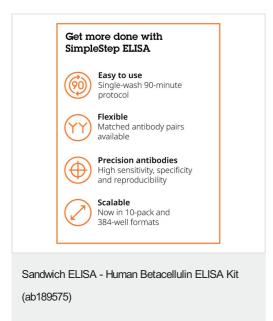
Interpolated concentrations of Betacellulin in Human serum from 10 donors.

Serum from 10 apparently healthy male donors was measured in duplicate. Six of the donors tested below the lowest tested standard. The mean Betacellulin concentration of the four donors was determined to be 125 pg/mL with a range of 88-173 pg/mL.



Sandwich ELISA - Human Betacellulin ELISA Kit (ab189575)

SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



To learn more about the advantages of SimpleStep ELISA® kits see **here**.

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

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