# abcam

### Product datasheet

# Human Azurocidin ELISA Kit ab213755

★★★★★ 1 Abreviews 1 Image

#### Overview

Product name Human Azurocidin ELISA Kit

**Detection method**Colorimetric

Precision Intra-assay

Sample	n	Mean	SD	CV%
1	16	675pg/ml	28.35	4.2%
2	16	1847pg/ml	94.2	5.1%
3	16	2816pg/ml	149.2	5.3%

Inter-assay

Sample	n	Mean	SD	CV%
1	24	873pg/ml	48.9	5.6%
2	24	2020pg/ml	129.3	6.4%
3	24	3174pg/ml	238.1	7.5%

Sample type Cell culture supernatant, Serum, Cell Lysate, Hep Plasma, EDTA Plasma, Tissue Homogenate

**Assay type** Sandwich (quantitative)

**Sensitivity** < 10 pg/ml

**Range** 62.5 pg/ml - 4000 pg/ml

Assay time 3h 30m

Assay duration Multiple steps standard assay

Species reactivity Reacts with: Human

**Product overview** The Human Azurocidin Enzyme-Linked Immunosorbent Assay (ELISA) kit (ab213755) is

designed for the quantitative measurement of Human Azurocidin in cell culture supernatants, cell

lysates, tissue homogenates, serum and plasma (heparin, EDTA).

The ELISA kit is based on standard sandwich enzyme-linked immunosorbent assay technology. A

monoclonal antibody from mouse specific for Azurocidin has been pre-coated onto 96-well plates. Standards (Expression system for standard: NSO; Immunogen sequence: I27-P248) and test samples are added to the wells, a biotinylated detection polyclonal antibody from goat specific for Azurocidin is added subsequently and then followed by washing with PBS or TBS buffer. Avidin-Biotin-Peroxidase Complex is added and unbound conjugates are washed away with PBS or TBS buffer. HRP substrate TMB is used to visualize HRP enzymatic reaction. TMB is catalyzed by HRP to produce a blue color product that changed into yellow after adding acidic stop solution. The density of yellow is proportional to the Human Azurocidin amount of sample captured in plate.

**Notes** 

Azurocidin, also known as cationic anti-microbial protein CAP37 or heparin-binding protein (HBP) is a protein that in humans is encoded by the AZU1 gene. This encoded protein is a member of the serine protease gene family, but it is not a serine proteinase, because the active site serine and histidine residues are replaced. Azurocidin is mapped to 19p13.3. The protein encoded by this gene is an azurophil granule antibiotic protein, with antibacterial activity. It is also an important multifunctional inflammatory mediator. In addition to it, Azurocidin is also a specific chemoattractant for monocytes. It lacks the chemotactic activity for neutrophils and lymphocytes, and this gene is probably responsible for the wave of monocytes that follows the initial wave of PMNs typical of the inflammatory response.

**Platform** 

Pre-coated microplate (12 x 8 well strips)

#### **Properties**

#### Storage instructions

Store at -20°C. Please refer to protocols.

Components	Identifier	1 x 96 tests	1 x 96 tests
ABC Diluent Buffer	Blue Cap	1 x 12ml	1 x 12ml
Adhesive Plate Seal		4 units	4 units
Antibody Diluent Buffer	Green Cap	1 x 12ml	1 x 12ml
Anti-Human Azurocidin Microplate (12 x 8 wells)		1 unit	1 unit
Avidin-Biotin-Peroxidase Complex (ABC)		1 x 100µl	1 x 100µl
Biotinylated anti- Human Azurocidin antibody		1 x 100µl	1 x 100µl
Lyophilized recombinant Human Azurocidin standard		2 vials	2 vials
Sample Diluent Buffer	Green Cap	1 x 30ml	1 x 30ml
TMB Color Developing Agent	Black Cap	1 x 10ml	1 x 10ml
TMB Stop Solution	Yellow Cap	1 x 10ml	1 x 10ml
Wash Buffer (25X)		1 x 20ml	1 x 20ml

#### **Function**

This is a neutrophil granule-derived antibacterial and monocyte- and fibroblast-specific chemotactic glycoprotein. Binds heparin. The cytotoxic action is limited to many species of Gramnegative bacteria; this specificity may be explained by a strong affinity of the very basic N-terminal half for the negatively charged lipopolysaccharides that are unique to the Gram-negative bacterial

outer envelope. It may play a role in mediating recruitment of monocytes in the second wave of inflammation. Has antibacterial activity against the Gram-nagative bacterium P.aeruginosa, this activity is inhibited by LPS from P.aeruginosa. Acting alone, it does not have antimicrobial activity against the Gram-negative bacteria A.actinomycetemcomitans ATCC 29532,

A.actinomycetemcomitans NCTC 9709, A.actinomycetemcomitans FDC-Y4, H.aphrophilus ATCC 13252, E.corrodens ATCC 23834, C.sputigena ATCC 33123, Capnocytophaga sp ATCC 33124, Capnocytophaga sp ATCC 27872 or E.coli ML-35. Has antibacterial activity against C.sputigena ATCC 33123 when acting synergistically with either elastase or cathepsin G.

Sequence similarities

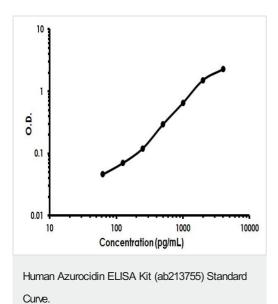
Belongs to the peptidase S1 family. Elastase subfamily.

Contains 1 peptidase S1 domain.

**Cellular localization** 

Cytoplasmic granule. Cytoplasmic granules of neutrophils.

#### **Images**



Human Azurocidin ELISA Kit (ab213755) Standard Curve.

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

#### Our Abpromise to you: Quality guaranteed and expert technical support

- · Replacement or refund for products not performing as stated on the datasheet
- Valid for 12 months from date of delivery
- Response to your inquiry within 24 hours
- We provide support in Chinese, English, French, German, Japanese and Spanish
- Extensive multi-media technical resources to help you
- We investigate all quality concerns to ensure our products perform to the highest standards

If the product does not perform as described on this datasheet, we will offer a refund or replacement. For full details of the Abpromise, please visit <a href="https://www.abcam.com/abpromise">https://www.abcam.com/abpromise</a> or contact our technical team.

## Terms and conditions

• Guarantee only valid for products bought direct from Abcam or one of our authorized distributors