abcam

Product datasheet

Human BAG-6 ELISA Kit (BAT3) ab275106

Recombinant

SimpleStep ELISA

5 Images

Overview

Precision

Recovery

Product name Human BAG-6 ELISA Kit (BAT3)

Detection method

Colorimetric

SD CV% Sample Mean n

8 3.7% Serum

Serum, EDTA Plasma Sample type Assay type Sandwich (quantitative)

Sensitivity 43.01 pg/ml

Range 101.56 pg/ml - 6500 pg/ml

Sample type	Average %	Range
Serum	98	% - %
EDTA Plasma	94	% - %

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human BAG-6 ELISA kit (ab275106) is a single-wash 90 min sandwich ELISA designed for the

> quantitative measurement of Human BAG-6 protein in serum and plasma samples. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human BAG-6 with 43.01 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

Intra-assay

Sample specific recovery

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.

Notes

BAG-6 (BAT3) is a chaperone protein found in the nucleus and ER, and also secreted extracellularly via exosomes. BAG-6 is involved in a diverse range of cellular processes, including (but not limited to) protein folding, apoptosis, and stimulation of NK cells. BAG-6 has been implicated in diseases like lung cancer, allergic encephalomyelitis and type 1 diabetes.

Platform

Pre-coated microplate (12 x 8 well strips)

Properties

Storage instructions

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

Components	1 x 96 tests
10X Human BAG-6 (BAT3) Capture Antibody	1 x 600µl
10X Human BAG-6 (BAT3) Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Human BAG-6 (BAT3) Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function

Chaperone that plays a key role in various processes such as apoptosis, insertion of tail-anchored (TA) membrane proteins to the endoplasmic reticulum membrane and regulation of chromatin. Acts in part by regulating stability of proteins and their degradation by the proteasome. Participates in endoplasmic reticulum stress-induced apoptosis via its interaction with AIFM1/AIF

by regulating AIFM1/AIF stability and preventing its degradation. Also required during spermatogenesis for synaptonemal complex assembly via its interaction with HSPA2, by inhibiting polyubiquitination and subsequent proteasomal degradation of HSPA2. Required for selective ubiquitin-mediated degradation of defective nascent chain polypeptides by the proteasome. In this context, may play a role in immuno-proteasomes to generate antigenic peptides via targeted degradation, thereby playing a role in antigen presentation in immune response. Key component of the BAG6/BAT3 complex, a cytosolic multiprotein complex involved in the post-translational delivery of tail-anchored (TA) membrane proteins to the endoplasmic reticulum membrane. TA membrane proteins, also named type II transmembrane proteins, contain a single C-terminal transmembrane region. BAG6/BAT3 acts by facilitating TA membrane proteins capture by ASNA1/TRC40: it is recruited to ribosomes synthesizing membrane proteins, interacts with the transmembrane region of newly released TA proteins and transfers them to ASNA1/TRC40 for targeting to the endoplasmic reticulum membrane. Also involved in DNA damage-induced apoptosis: following DNA damage, accumulates in the nucleus and forms a complex with p300/EP300, enhancing p300/EP300-mediated p53/TP53 acetylation leading to increase p53/TP53 transcriptional activity. When nuclear, may also act as a component of some chromatin regulator complex that regulates histone 3 'Lys-4' dimethylation (H3K4me2).

Sequence similarities

Post-translational modifications

Cellular localization

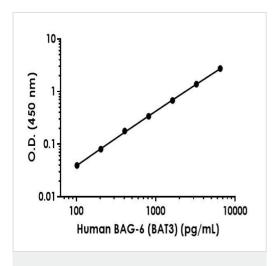
Contains 1 ubiquitin-like domain.

Cleavage by caspase-3 releases a C-terminal peptide that plays a role in ricin-induced apoptosis.

In case of infection by L.pneumophila, ubiquitinated by the SCF(LegU1) complex.

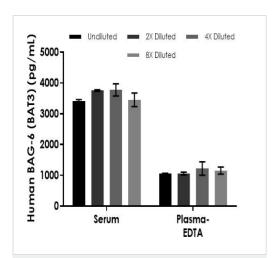
Cytoplasm > cytosol. Nucleus. The C-terminal fragment generated by caspase-3 is cytoplasmic.

Images



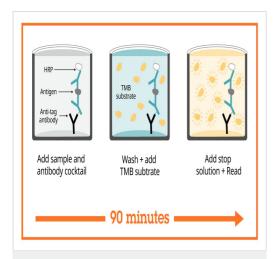
Example of human BAG-6 standard curve in Sample Diluent NS.

The BAG-6 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean +/- SD) are graphed.



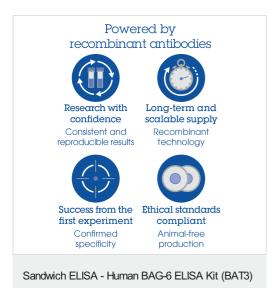
Interpolated concentrations of native BAG-6 in human serum and plasma (EDTA) samples.

The concentrations of BAG-6 were measured in duplicates, interpolated from the target standard curves and corrected for sample dilution. Undiluted samples are as follows: serum 50%, plasma (EDTA) 100%. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean target concentration was determined to be 3,597.11 pg/ml in serum and 1,122.29 pg/ml in plasma (EDTA).



Sandwich ELISA - Human BAG-6 ELISA Kit (BAT3) (ab275106)

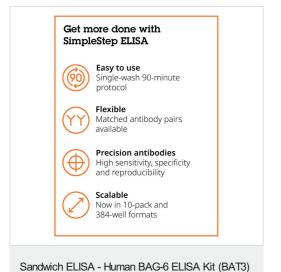
SimpleStep ELISA technology allows the formation of the antibodyantigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.



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To learn more about the advantages of recombinant antibodies see **here**.



To learn more about the advantages of SimpleStep $\mathsf{ELISA}^{\texttt{@}}$ kits see $\underline{\mathsf{here}}$.

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