abcam

Product datasheet

Human Biglycan ELISA Kit ab245709

Recombinant SimpleStep ELISA

1 References 5 Images

Overview

Product name Human Biglycan ELISA Kit

Detection method Colorimetric

Precision Intra-assav

Sample	n	Mean	SD	CV%
extract	24			3.3%

Inter-assay

Sample	n	Mean	SD	CV%
extract	3			5.5%

Sample type Tissue Extracts

Assay type Sandwich (quantitative)

Sensitivity 32 pg/ml

156.25 pg/ml - 10000 pg/ml Range

Recovery Sample specific recovery

Sample type	Average %	Range
Tissue Extracts	96	85% - 105%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human Biglycan ELISA Kit (ab245709) is a single-wash 90 min sandwich ELISA designed for the

> quantitative measurement of Biglycan protein in tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Biglycan with 32 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.

Notes

Abcam has not and does not intend to apply for the REACH Authorisation of customers' uses of products that contain European Authorisation list (Annex XIV) substances. It is the responsibility of our customers to check the necessity of application of REACH Authorisation, and any other relevant authorisations, for their intended uses.

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 Biglycan Capture Antibody	1 x 600µl
10X Human Biglycan Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
50X Cell Extraction Enhancer Solution (ab193971)	1 x 1ml
5X Cell Extraction Buffer PTR (ab193970)	1 x 10ml
Antibody Diluent CPI - HAMA Blocker (ab193969)	1 x 6ml
Human Biglycan 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

May be involved in collagen fiber assembly.

Tissue specificity

Found in several connective tissues, especially in articular cartilages.

Sequence similarities

Belongs to the small leucine-rich proteoglycan (SLRP) family. SLRP class I subfamily.

Contains 12 LRR (leucine-rich) repeats.

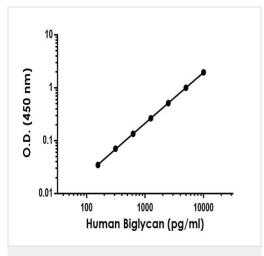
Post-translational modifications

 $\label{thm:condition} The \ two \ attached \ glycosaminoglycan \ chains \ can \ be \ either \ chondroitin \ sulfate \ or \ dermatan \ sulfate.$

Cellular localization

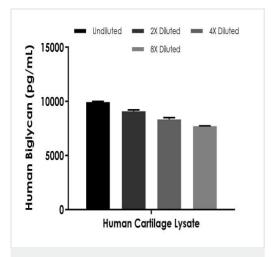
Secreted > extracellular space > extracellular matrix.

Images



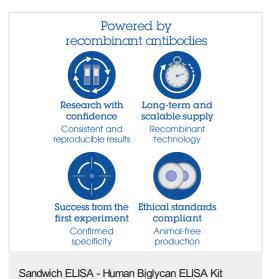
Example of human Biglycan standard curve in 1X Cell Extraction Buffer PTR.

The Biglycan 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.



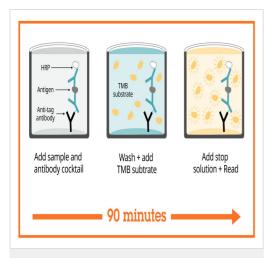
Interpolated concentrations of native Biglycan in human cartilage tissue extract based on a 62.5 $\mu g/mL$ extract load.

The concentrations of Biglycan were measured in duplicate and interpolated from the Biglycan standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean +/- SD, n=2). The mean Biglycan concentration was determined to be 8467.67 pg/mL.



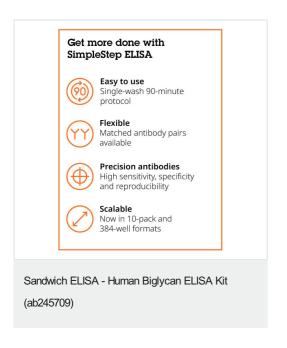
(ab245709)

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



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.

Sandwich ELISA - Human Biglycan ELISA Kit (ab245709)



To learn more about the advantages of SimpleStep ELISA® kits see <u>here</u>.

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