

Product datasheet

Exendin-4 ELISA Kit ab272192

SimpleStep ELISA

[3 Images](#)

Overview

Product name Exendin-4 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Supernatant	8			6.1%

Inter-assay

Sample	n	Mean	SD	CV%
Supernatant	3			1.9%

Sample type Cell culture media

Assay type Sandwich (quantitative)

Sensitivity 2.58 pg/ml

Range 11.72 pg/ml - 750 pg/ml

Recovery

Sample specific recovery

Sample type	Average %	Range
Cell culture media	115	113% - 118%

Assay time 1h 30m

Assay duration One step assay

Product overview

Exendin-4 ELISA kit (ab272192) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Exendin-4 protein in cell culture media. It uses our proprietary SimpleStep ELISA® technology. Quantitate Exendin-4 with 2.58 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 ([ab203359](#)) is available to use as an alternative to the 96-well microplate provided with SimpleStep ELISA® kits.

Notes Exendin-4 is a 39 amino acid peptide found in venom from the Gila monster *Helicoderma suspectum*. Exendin-4 is a member of the glucagon secretin family of peptide hormones and neuropeptides. The venom protein mimics the incretin hormone glucagon-like peptide 1 (GLP-1) and stimulates insulin synthesis and secretion, protects against beta-cell apoptosis in response to different insults, and promotes beta-cell proliferation. Exendin-4 also promotes satiety, reduces food intake, fat deposition and body weight. It also is known to inhibit gastric emptying. Exendin-4 interactions with GLP-1 receptor (GLP1R) induces hypotension that is mediated by relaxation of cardiac smooth muscle.

Platform Pre-coated microplate (12 x 8 well strips)

Properties

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

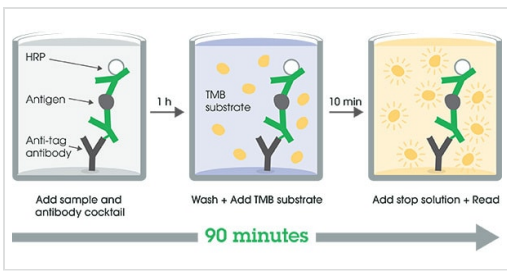
Components	1 x 96 tests
10X Exendin-4 Capture Antibody	1 x 600µl
10X Exendin-4 Detector Antibody	1 x 600µl
10X Wash Buffer PT (ab206977)	1 x 20ml
Antibody Diluent 4BI	1 x 6ml
Exendin-4 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml
SimpleStep Pre-Coated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

Components	1 x 96 tests
TMB Development Solution	1 x 12ml

Relevance Exendin 4 is a 39 amino acid peptide found in venom from the Gila monster *Helicoderma suspectum*. It is a member of the glucagon secretin family of peptide hormones and neuropeptides. Exendin 4 is a potent agonist of the GLP1 receptor and hence a potent stimulator of insulin secretion.

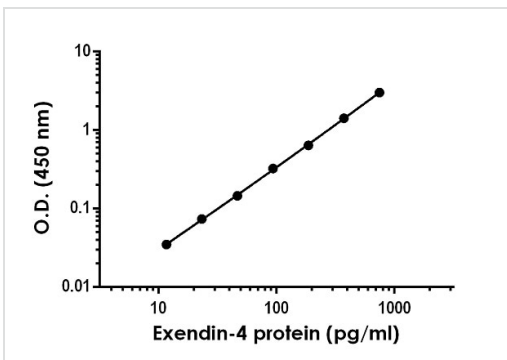
Cellular localization Secreted

Images



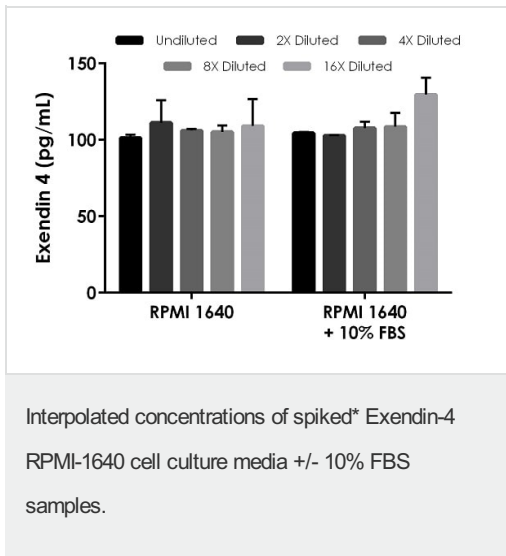
SimpleStep ELISA technology allows the formation of the antibody-antigen complex in one single step, reducing assay time to 90 minutes. Add samples or standards and antibody mix to wells all at once, incubate, wash, and add your final substrate. See protocol for a detailed step-by-step guide.

SimpleStep ELISA Protocol Diagram



The Exendin-4 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.

Example of cell culture media Exendin-4 standard curve in Sample Diluent NS.



Interpolated concentrations of spiked* Exendin-4 RPMI-1640 cell culture media +/- 10% FBS samples.

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