

Human Niemann Pick C2 ELISA Kit ab227894

Recombinant SimpleStep ELISA[®]

7 Images

Overview

Product name Human Niemann Pick C2 ELISA Kit

Detection method Colorimetric

Precision

Intra-assay

Sample	n	Mean	SD	CV%
Tissue ext	8			6.2%

					Inter-assay
Sample	n	Mean	SD	CV%	
Tissue ext	3			7.6%	

Sample type Cell culture supernatant, Cell culture extracts, Tissue Extracts

Assay type Sandwich (quantitative)

Sensitivity 2.58 pg/ml

Range 19 pg/ml - 1200 pg/ml

Recovery		Sample specific recovery		
		Sample type	Average %	Range
		Cell culture supernatant	95	91% - 98%
		Cell culture extracts	93	90% - 95%
		Tissue Extracts	94	93% - 94%

Assay time 1h 30m

Assay duration One step assay

Species reactivity Reacts with: Human

Product overview Human Niemann Pick C2 ELISA Kit (ab227894) is a single-wash 90 min sandwich ELISA designed for the quantitative measurement of Niemann Pick C2 protein in cell culture extracts, cell

culture supernatant, and tissue extracts. It uses our proprietary SimpleStep ELISA® technology. Quantitate Human Niemann Pick C2 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

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

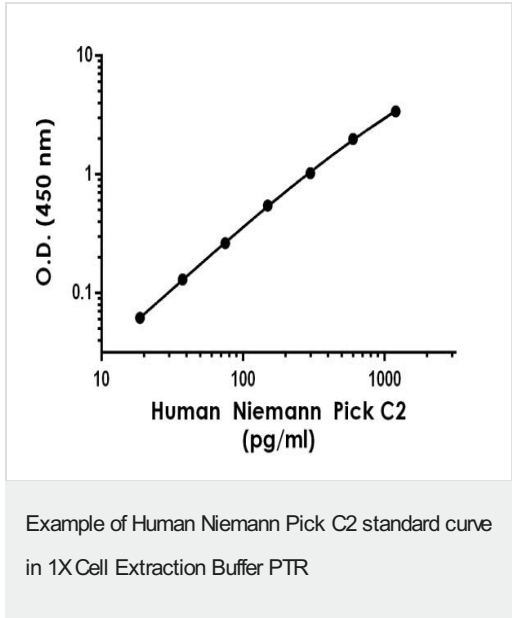
Storage instructions Store at +4°C. Please refer to protocols.

Components	1 x 96 tests
10X Human Niemann Pick C2 Capture Antibody	1 x 600µl
10X Human Niemann Pick C2 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 4BR	1 x 6ml
Denaturant	1 x 500µl
Human Niemann Pick C2 Lyophilized Recombinant Protein	2 vials
Plate Seals	1 unit
Sample Diluent NS (ab193972)	1 x 12ml

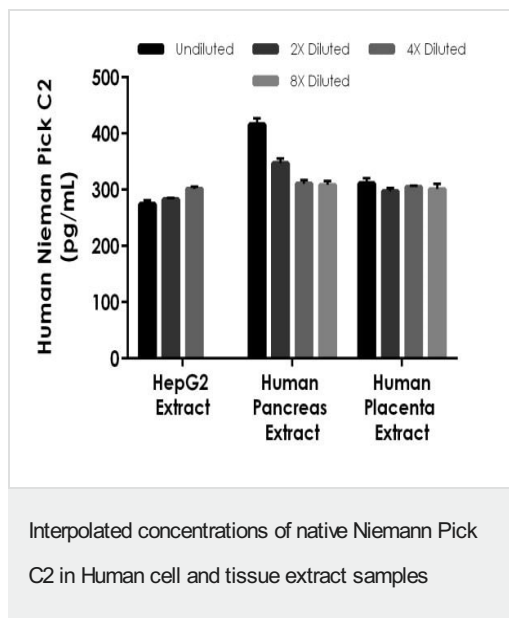
Components	1 x 96 tests
SimpleStep Pre-Coated 96-Well Microplate (ab206978)	1 unit
Stop Solution	1 x 12ml
TMB Development Solution	1 x 12ml

Function	May be involved in the regulation of the lipid composition of sperm membranes during the maturation in the epididymis.
Tissue specificity	Epididymis.
Involvement in disease	Defects in NPC2 are the cause of Niemann-Pick disease type C2 (NPDC2) [MIM:607625]. A lysosomal storage disorder that affects the viscera and the central nervous system. It is due to defective intracellular processing and transport of low-density lipoprotein derived cholesterol. It causes accumulation of cholesterol in lysosomes, with delayed induction of cholesterol homeostatic reactions. Niemann-Pick disease type C2 has a highly variable clinical phenotype. Clinical features include variable hepatosplenomegaly and severe progressive neurological dysfunction such as ataxia, dystonia and dementia. The age of onset can vary from infancy to late adulthood.
Sequence similarities	Belongs to the NPC2 family.
Cellular localization	Secreted.

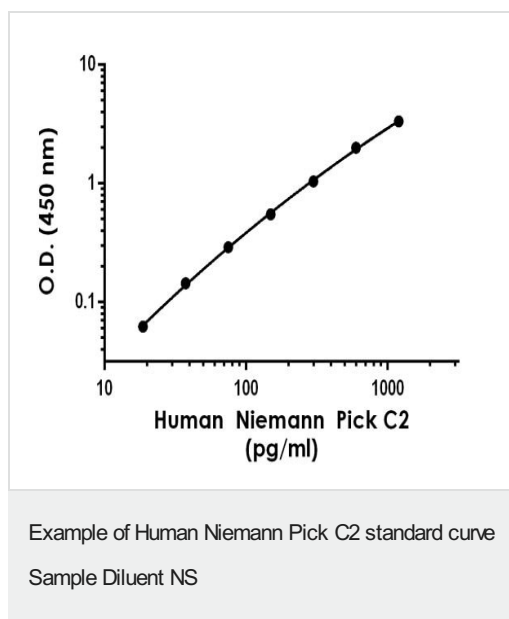
Images



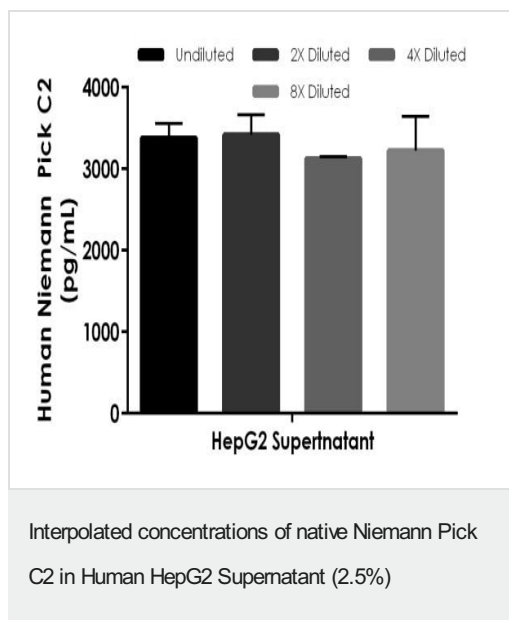
Background-subtracted data values (mean +/- SD) are graphed.



The concentrations of Niemann Pick C2 were measured in duplicate, interpolated from the Niemann Pick C2 standard curves and corrected for sample dilution. Undiluted samples are as follows: HepG2 cell extract (100 mg/ml), Human Pancreas (100 mg/ml) and Human Placenta (100 mg/ml) extracts. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2). The mean Niemann Pick C2 concentration was determined to be 286.36 pg/mL in HepG2 extract, 345.68 pg/mL in Human Pancreas extract and 303.6 pg/mL in Human Placenta extract based on the 100 μ g/mL load.



Background-subtracted data values (mean \pm SD) are graphed.



The concentrations of Niemann Pick C2 were measured in duplicate and interpolated from the Niemann Pick C2 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2). The mean Niemann Pick C2 concentration was determined to be 3288.10 pg/mL in HepG2 Supernatant.

Powered by
recombinant antibodies

Research with confidence
Consistent and reproducible results

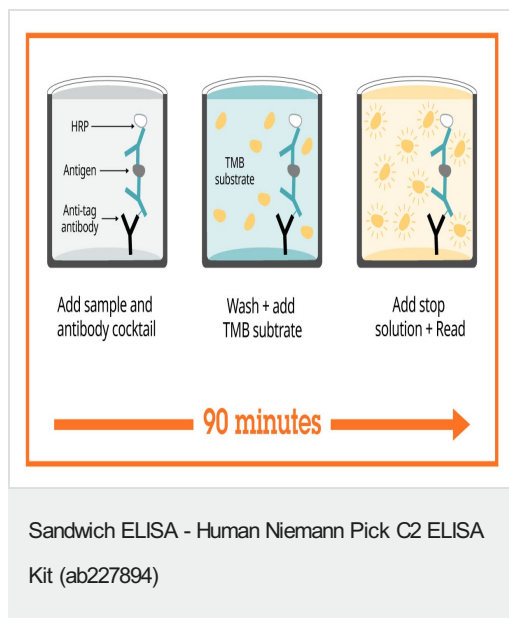
Long-term and scalable supply
Recombinant technology

Success from the first experiment
Confirmed specificity

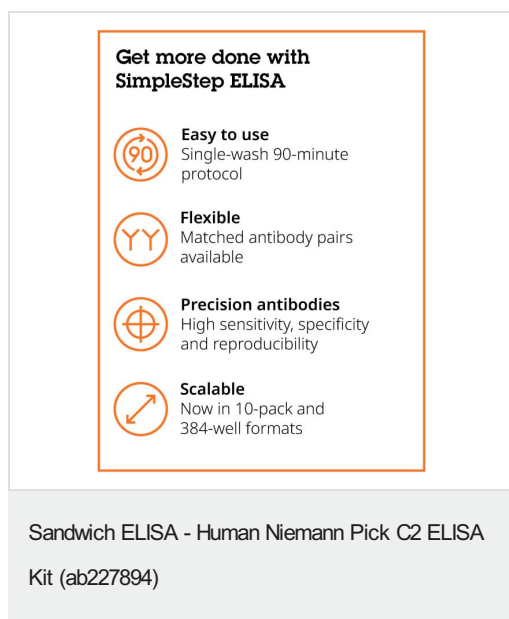
Ethical standards compliant
Animal-free production

Sandwich ELISA - Human Niemann Pick C2 ELISA Kit (ab227894)

To learn more about the advantages of recombinant antibodies see [here](#).



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.



To learn more about the advantages of SimpleStep ELISA® kits see [here](#).

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