

Human Toll-like Receptor 9 ELISA Kit ab252358

Recombinant SimpleStep ELISA

5 Images

Overview

Product name	Human Toll-like Receptor 9 ELISA Kit				
Detection method	Colorimetric				
Precision	Intra-assay				
	Sample	n	Mean	SD	CV%
	extract	8			1%
Sample type	Cell culture extracts				
Assay type	Sandwich (quantitative)				
Sensitivity	248 pg/ml				
Range	1.25 ng/ml - 80 ng/ml				
Recovery	Sample specific recovery				
	Sample type		Average %		Range
	Cell culture extracts		115		% - %
Assay time	1h 30m				
Assay duration	One step assay				
Species reactivity	Reacts with: Human				
Product overview	Human Toll-like Receptor 9 ELISA Kit (ab252358) is a single-wash 90 min sandwich ELISA				

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 Toll-like Receptor 9 Capture Antibody	1 x 600µl
10X Human Toll-like Receptor 9 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 4BI	1 x 6ml
Human Toll-like Receptor 9 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

Key component of innate and adaptive immunity. TLRs (Toll-like receptors) control host immune response against pathogens through recognition of molecular patterns specific of microorganisms. TLR9 is a nucleotide-sensing TLR which is activated by unmethylated cytidine-phosphate-guanosine (CpG) dinucleotides. Acts via MYD88 and TRAF6, leading to NF-kappa-B activation, cytokine secretion and the inflammatory response.

Tissue specificity

Highly expressed in spleen, lymph node, tonsil and peripheral blood leukocytes, especially in

plasmacytoid pre-dendritic cells. Levels are much lower in monocytes and CD11c+ immature dendritic cells. Also detected in lung and liver.

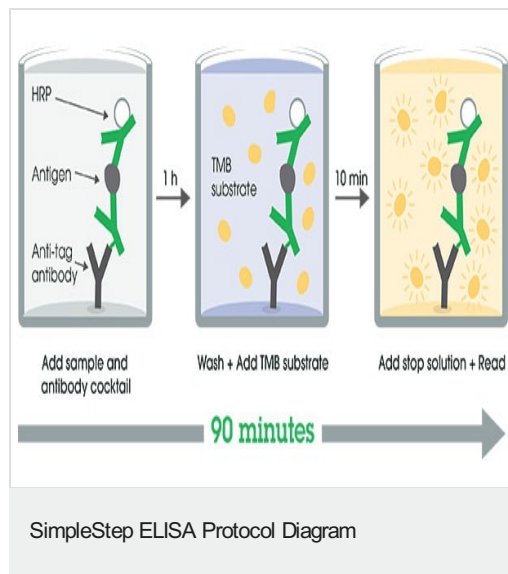
Sequence similarities

Belongs to the Toll-like receptor family.
Contains 26 LRR (leucine-rich) repeats.
Contains 1 TIR domain.

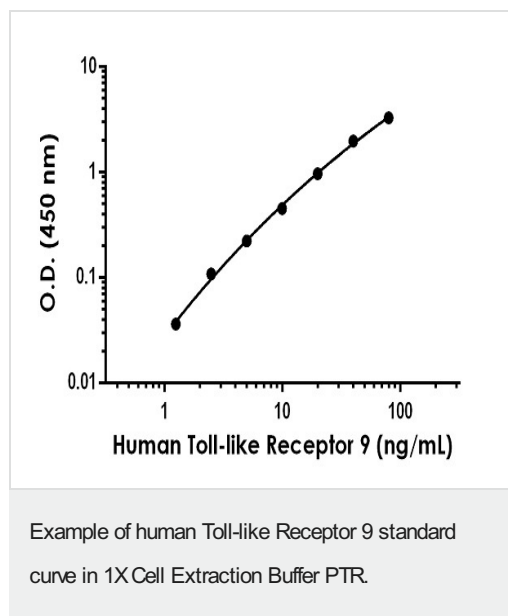
Cellular localization

Endoplasmic reticulum membrane. Endosome. Lysosome. Cytoplasmic vesicle > phagosome.
Relocalizes from endoplasmic reticulum to endosome and lysosome upon stimulation with agonist.

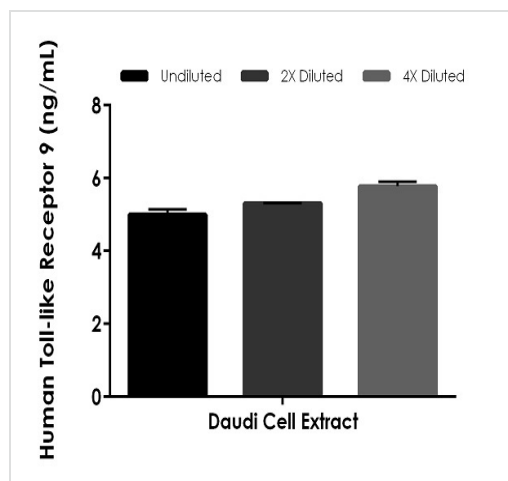
Images



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.

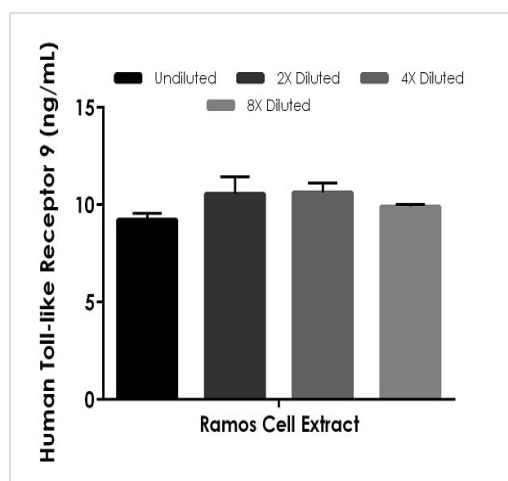


The Toll-like Receptor 9 standard curve was prepared as described in Section 10. Raw data values are shown in the table. Background-subtracted data values (mean \pm SD) are graphed.



Interpolated concentrations of native Toll-like Receptor 9 in human Daudi cell extract based on a 125 µg/mL extract load.

The concentrations of Toll-like Receptor 9 were measured in duplicate and interpolated from the Toll-like Receptor 9 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2).



Interpolated concentrations of spike Toll-like Receptor 9 in human Ramos cell extract based on a 250 µg/mL extract load.

The concentrations of Toll-like Receptor 9 were measured in duplicate and interpolated from the Toll-like Receptor 9 standard curve and corrected for sample dilution. The interpolated dilution factor corrected values are plotted (mean \pm SD, n=2).

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 Toll-like Receptor 9
ELISA Kit (ab252358)

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

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

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