

Datasheet for ABIN3198513

CD14 ELISA Kit

[Go to Product page](#)

Overview

Quantity:	96 tests
Target:	CD14
Binding Specificity:	Soluble
Reactivity:	Human
Method Type:	Sandwich ELISA
Detection Range:	125-8000 pg/mL
Minimum Detection Limit:	125 pg/mL
Application:	ELISA

Product Details

Purpose:	This assay employs the quantitative sandwich enzyme immunoassay technique for quantitative detection.
Sample Type:	Cell Culture Supernatant, Plasma, Serum
Analytical Method:	Quantitative
Detection Method:	Colorimetric
Specificity:	SCD14, Human
Sensitivity:	2.58 pg/mL
Components:	Plate, Standard, Diluent
Material not included:	Microplate reader capable of measuring absorbance at 450 nm, with correction wavelength set at 570 nm or 630 nm.

Product Details

Pipettes and pipette tips.
50 µL to 300 µL adjustable multichannel micropipette with disposable tips.
Multichannel micropipette reservoir.
Beakers, flasks, cylinders necessary for preparation of reagents.
Deionized or distilled water.
Polypropylene test tubes for dilution.

Target Details

Target:	CD14
Alternative Name:	CD14 (CD14 Products)
Background:	CD14 is expressed mainly by macrophages and (at 10-times lesser extent) by neutrophils. It is also expressed by dendritic cells. It is a component of the innate immune system. CD14 acts as a co-receptor for the detection of bacterial lipopolysaccharide (LPS). CD14 can bind LPS only in the presence of lipopolysaccharide-binding protein (LBP). CD14 exists in two forms, one anchored to the membrane by a glycosylphosphatidylinositol tail (mCD14), the other a soluble form (sCD14). sCD14 either appears after shedding of mCD14 (48 kDa) or is directly secreted.
Gene ID:	929
NCBI Accession:	NM_001174105
UniProt:	P08571
Pathways:	TLR Signaling , Activation of Innate immune Response , Cellular Response to Molecule of Bacterial Origin , Toll-Like Receptors Cascades

Application Details

Sample Volume:	100 µL
Assay Time:	3 - 4 h
Plate:	Pre-coated
Restrictions:	For Research Use only

Handling

Buffer:	Buffer contains: 0.02 % sodium azide
Preservative:	Sodium azide

Handling

Precaution of Use:	This product contains Sodium azide: a POISONOUS AND HAZARDOUS SUBSTANCE which should be handled by trained staff only.
Handling Advice:	<p>Intended for research use only and are not for use in diagnostic or therapeutic procedures.</p> <p>Treat all chemicals with caution because they can be potentially hazardous.</p> <p>It is recommended that this product is handled only by persons who have been trained in laboratory techniques and in accordance with the principles of good laboratory practice. Wear personal protection equipment such as laboratory coat, safety glasses and gloves.</p> <p>Avoid direct contact with skin or eyes. Wash immediately with water in the case of contact with skin or eyes. Avoid contact of skin or mucous membranes with kit reagents or specimens. See material safety data sheet(s) for specific advice.</p> <p>Pure water or deionized water must be used for reagent preparation.</p> <p>The Stop Solution provided with this kit is an acid solution. Wear personal protection equipment with caution.</p> <p>Do not expose kit reagents to strong light during storage and incubation.</p> <p>Rubber or disposable latex gloves should be worn while handling kit reagents or specimens.</p> <p>Avoid contact of substrate solution with oxidizing agents and metal.</p> <p>Avoid splashing or generation of aerosols.</p> <p>Use disposable pipette tips and/or pipettes to avoid microbial or cross-contamination of reagents or specimens which may invalidate the test.</p> <p>Use clean, dedicated reagent trays for dispensing the conjugate and substrate reagent.</p> <p>Exposure to acid inactivates the HRP and antibody conjugate.</p> <p>Substrate solution must be warmed to room temperature prior to use.</p> <p>Decontaminate and dispose specimens and all potentially contaminated materials as they could contain infectious agents. The preferred method of decontamination is autoclaving for a minimum of 1 hour at 121.5 °C.</p> <p>Liquid wastes not containing acid and neutralized waste may be mixed with sodium hypochlorite in volumes such that the final mixture contains 1.0 % sodium hypochlorite. Allow 30 minutes for effective decontamination. Liquid waste containing acid must be neutralized prior to the addition of sodium hypochlorite.</p> <p>All reagents including microplate, samples, standards and working solution should be warmed to room temperature before use.</p> <p>To obtain accurate results, using adhesive film to seal the plate during incubation is suggested.</p> <p>It is recommended that all samples and standards be assayed in duplicate.</p> <p>Avoid foaming when mixing or reconstituting solutions containing protein.</p> <p>To avoid cross-contamination, use separate reservoirs for each reagent and change pipette tips</p>

between each standard, sample and reagent.

When using an automated plate washer, adding a 30 seconds soak period before washing step and/or rotating the plate between wash steps may improve assay precision.

When pipetting reagents, maintain a consistent order of addition from well-to-well.

Keep Substrate solution protected from direct strong light. Substrate Solution should turn to gradations of blue after a proper color development.

Read absorbance within 30 minutes after adding stop solution.

Take care not to scratch the inner surface of the microwells.

Storage: 4 °C

Storage Comment: Store kit reagents between 2 and 8 °C. Immediately after use remaining reagents should be returned to cold storage (2 to 8 °C).

Expiry of the kit and reagents is stated on labels. Expiration date of the kit components can only be guaranteed if the components are stored properly, and if, in case of repeated use of one component, this reagent is not contaminated by the first handling.

Unopened Kit: Store at 2 - 8 °C (See expiration date on the label).

Opened/Reconstituted Reagents: Up to 1 month at 2 - 8 °C.

Reconstituted Standard: Up to 1 month at ≤ -20 °C in a manual defrost freezer. Avoid repeated freeze-thaw cycles.

Microplate Wells: Up to 1 month at 2 - 8 °C. Return unused strips to the foil pouch containing the desiccant pack, reseal along entire edge to maintain plate integrity. Provided this is within the expiration date of the kit