

ElioDX™ Interleukin 6 (IL-6) Cuvette

Product number RP-IL610058

Product description The ElioDX™ Interleukin 6 (IL-6) Kit is an evanescent immunoassay for the *in vitro* quantitative analysis of procalcitonin in human serum and plasma. The assay is wash-free and provides rapid results in 10 minutes.

Intended use The ElioDX™ Interleukin 6 (IL-6) Kit is intended for use on ElioDX™ Readers in combination with software provided by ELIONOVA AG. For research use only. Not for use in diagnostic procedures.

Key features EVA technology by ELIONOVA works by generating an evanescent field of exciting light at the bottom of the well. The exciting laser light beam (635nm) is totally reflected at the liquid - solid interface. A 200 nm bottom layer of the adjacent liquid is selectively illuminated: only fluorophores localized in this evanescent field absorb the laser beam photons and subsequently emit light of longer wavelength. The liquid above the 200nm range is not illuminated. An analyte captured at the bottom of the well is detected by an antibody labelled with a fluorophore, which now can absorb light and then emit light of a longer wavelength. The emitted light leaving the device through the bottom is recorded in real time. Fluorophores not being bound to the bottom within the evanescent field (as the specific analyte of interest is not present) do not create a signal.

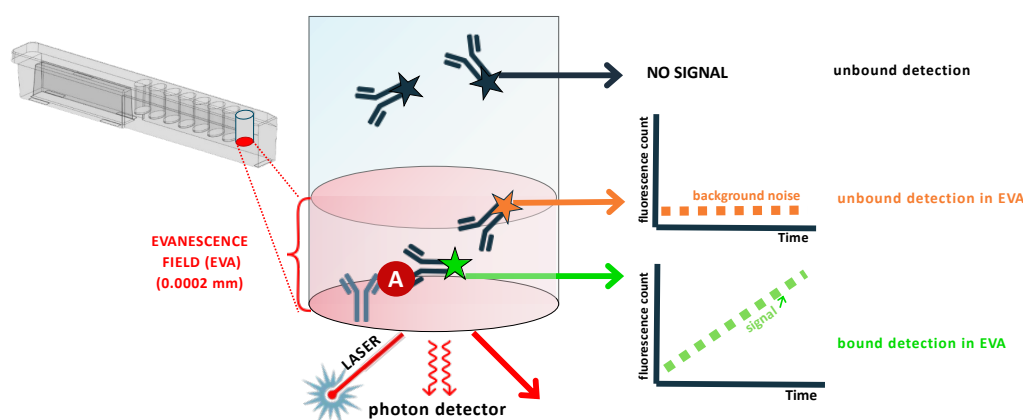


Figure 1. The ElioDX™ system uses evanescent field (EVA) technology for specific fluorescence detection. Detection antibodies labeled with fluorophores bound to the analyte generate signals (green star) within the evanescent field. Unbound antibodies cause low background fluorescence (orange star), while fluorophores outside the field produce no signal (black star). This reduces background and enables sensitive, real-time quantification.

Contents and Storage

Components	Quantity	Storage
ElioDX™ Interleukin IL6 (IL-6) Cuvette	10	2 - 8 °C

Note:

Each well of the cuvette contains all necessary assay reagents.

Only open individual cuvettes immediately before use.

Unused cuvettes must remain sealed and should be returned to cold storage (2°C to 8°C) promptly after opening the kit.

Stability	Unopened cuvettes are stable at 2°C to 8°C up to the stated expiry date.
Materials required but not provided	The following materials are not included in the kit, but will be required to perform this assay: • ElioDX™ reader • 2 µL to 1000 µL adjustable single channel or multichannel micropipettes with disposable tips, Lobind tubes, Tissue.
Precautions	• Do not touch the sides of the cuvette located near the wells with your fingers, as this may negatively impact optical measurement. • We recommend that this product is used in accordance with the principles of good laboratory practice. Wear suitable protective clothing such as laboratory coats and gloves. Do not pipet by mouth. Do not eat, drink or smoke in areas where the kit and samples are handled. • Avoid contact of skin or mucous membranes with samples and with samples dissolved in the kit. • Do not use kit reagents beyond expiry date on label. • The kit is intended for research use only and not for use in diagnostic or therapeutic procedures.
Preparation of samples	Sample Collection and Storage This assay has been validated for use with samples prepared in assay buffer only. Performance with biological matrices, including but not limited to serum, plasma, saliva, urine, milk, cerebrospinal fluid, tissue lysates, and cell culture supernatants, has not been established and should be validated by the user prior to use. Samples should be aliquoted and stored at -20°C or below. Repeated freeze-thaw cycles should be avoided. Prior to analysis, frozen samples should be thawed slowly to room temperature and mixed gently. The analytical measuring range of the assay is 5pg/ml – 10 ng/ml. Matrix effects may influence assay performance when analyzing biological samples. Validated Sample Type • Assay buffer: Samples and standards prepared in the recommended assay buffer may be analyzed directly according to the assay procedure.
Assay Procedure	Bring all reagents, samples and cuvettes to room temperature before use. Centrifuge the sample again after thawing before the assay. It is recommended that all samples be assayed in duplicate 1. Register cuvette to ElioDX™ Cloud according to ElioDX™ Cloud User Guide. 2. Aspirate 20 µL of each control or sample and transfer into the defined well. Note: Use reverse pipetting for improved accuracy and consistency 3. Shake the cuvette with the provided StarLab® Vortex Mixer to homogenize solution which aligned on the cuvette shaking holder (provided by Elionova AG) at 800 rpm for 30 seconds. 4. Carefully clean the outside and bottom of the cuvette surface using a clean tissue (e.g., Kimberly-Clark™ reference 7552 or equivalent). 5. Insert the cuvette into the ElioDX™ Reader and start the measurement according to the ElioDX™ Cloud User Guide.
Calculation of Results	1. Download the data from ElioDX™ Cloud following the instructions in the ElioDX™ Cloud Guide.

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2. Open the provided Excel file named "ElioDX_IL6_calculations_LotXXXXX" (where XXXXX is the lot number printed on the kit box).
 3. This Excel file contains the lot-specific standard curve and back-calculation formulas for your samples.
 4. Enter your measured dC values into the designated column to automatically calculate the corresponding IL6 concentrations.

Note: The standard curve supplied with the kit has been generated for assay buffer only. Samples prepared in other matrices may exhibit matrix effects and require the generation and validation of a matrix-specific standard curve by user

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