

Quinolinic Acid ELISA kit

High Sensitivity, Plasma & Serum

Ref: IS-I-0100R

Quinolinic acid (QA) is a metabolite produced along the Kynurenine Pathway, which converts the aminoacid Tryptophan to NAD⁺, a co-factor of many enzymatic reactions.

The Quinolinic Acid ELISA kit is optimized for the quantitation of Quinolinic Acid (QUIN or QA) within **serum and plasma** samples. This easy-to-use competitive assay is well-suited for both small and large series of samples. Working with a low sample volume of 25µL, this assay enables pre-clinical and clinical sample testings.

Sample type Serum, Plasma

Capacity 96 tests

Sensitivity 35.9nM

Range 150 - 12150nM

Assay time Sample acylation 120 min, ELISA overnight

Reactivity Reacts with all species

References [Cited in 10 papers](#)

INFORMATIONS

Product overview

| | |
|------------------------------|--|
| Product name | Quinolinic Acid ELISA kit |
| Description | Competitive ELISA kit for the quantitative measurement of Quinolinic Acid levels in serum and plasma samples. For research use only |
| Format | 96-well plate |
| Samples | Serum, Plasma |
| Minimal sample volume | 25µL |
| Reactivity | Reacts with all species |
| Standard range | 25 – 2000ng/mL |
| Sensitivity | < 6ng/mL |
| Specificity | No significant cross-reactivity was observed with Quinolinic Acid analogs such as Kynurenic acid, Xanthurenic acid, Kynurenine, Picolinic acid, 3-Hydroxy-Anthranilic Acid |
| Assay time | Sample acylation 120 min and ELISA overnight |
| Storage | Store at 2-8°C for up to 6 months |
| Datasheets | Instructions for use , Material Safety Datasheet |

PROTOCOLS

Sample collection & storage

Serum: Do not use lipemic, haemolytic samples, as well as samples containing precipitates or fibrin strands
Plasma (Heparin)
Store samples at 2-8°C for up to 48h or -20°C for longer period (up to 6 months)

Sample preparation

Sample acylation (120 min)

ELISA

Quinolinic acid antiserum overnight incubation, revelation and read steps (1h)

Detailed protocol

[Download instructions for use](#)

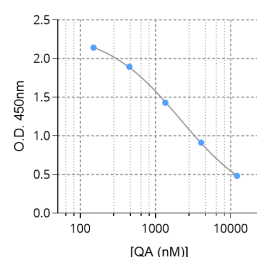
REFERENCES

Product citations

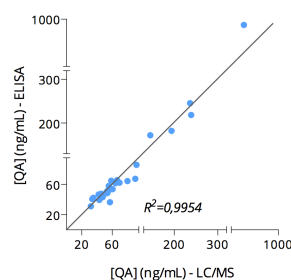
Product pictures



Quinolinic acid ELISA kit



Typical standard curve of Quinolinic acid ELISA

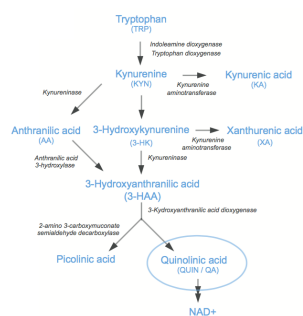


Cross-validation of Quinolinic Acid ELISA and LC/MS data in human serum samples

Human serum samples (n=28) were processed for Quinolinic Acid measurement by mean of both QA ELISA kit and liquid chromatography-mass spectrometry (LC/MS). As depicted, results obtained with ELISA and LC/MS are highly correlated ($R^2=0.9954$).



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Quinolinic acid (QA) is a metabolite produced along the Kynurenine Pathway

Quinolinic acid (QA) is a metabolite produced along the Kynurenine Pathway, which converts the amino acid Tryptophan to NAD^+ , a co-factor of many enzymatic reactions. It has been described to share several neurotoxic functions particularly through the activation of the N-Methyl-D-Aspartate receptor. Its production occurring in myeloid cells (macrophages, microglia, etc.) is mainly driven by inflammatory stress and is therefore suspected to play a key role in neuroinflammatory disorders such as Alzheimer and Parkinson diseases but also Multiple Sclerosis, Amyotrophic Lateral Sclerosis. Hence, while QA has been proposed as a biomarker in these indications, it might certainly warrant further investigation to serve as a surrogate in other "inflammation" related diseases such as cancer, metabolic disorders, etc.

Contact information

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To order, review, ask for technical support, visit product page at:

<https://www.immusmol.com/shop/quinolinic-acid-elisa-kit/>