

L-Asparagine ELISA kit I High Sensitivity I Plasma

Ref: IS-I-1600R

L-Asparagine is a conditionally non-essential amino acid that can be produced in our body. However, Asparagine (Asn) is essential for the growth of highly proliferative cells such as cancers and it must be provided by the environment. Targeting Asn using recombinant Asparaginase thus represents an attractive target. In order to provide an accurate and easy-to-implement tool to evaluate L-Asparagine (Asn) functions, we developed and validated an ELISA kit for Asn quantitation in plasma samples. The assay requires a sample volume as low as 20 μ L and is characterized by a 2.3 μ M sensitivity.

Sample type Plasma

Capacity 96 tests

Sensitivity 2.3 μ M

Range 4.4 - 375 μ M

Assay time Sample preparation 3h, ELISA overnight

Reactivity Reacts with all species

INFORMATIONS

Product overview

Product name	L-Asparagine ELISA kit
Description	Competitive ELISA kit for the quantitative measurement of L-Asparagine (Asn) in plasma samples. For research use only
Format	96-well plate
Samples	Plasma
Minimal sample volume	20 μ L
Reactivity	Reacts with all species
Standard range	4.4 - 375 μ M (0.6 - 49.5 μ g/mL)
Sensitivity	2.3 μ M (0.30 μ g/mL)
Specificity	No significant cross-reactivity was observed with D-Asparagine, L-Aspartate, L-Glutamate, L-Glutamine.
Assay time	Sample preparation 3h and ELISA overnight
Storage	Store at 2-8°C for up to 6 months
Datasheets	Instructions for use , Material Safety Datasheet

For research use only - Do not use for diagnostic

PROTOCOLS

Sample collection & storage	EDTA Plasma Store samples at 2-8°C for up to 48h or -20°C for longer period (up to 6 months)
Sample preparation	Sample preparation (3 hours)
ELISA	L-Asparagine antiserum overnight incubation, revelation and read steps (1h)

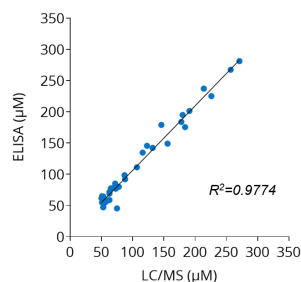
Detailed protocol	Download instructions for use
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REFERENCES

Selected articles on Asparagine

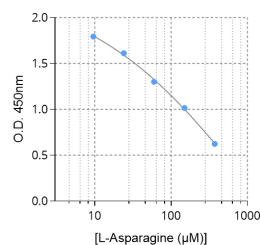
- Van Trimpont et al., [Novel Insights on the Use of L-Asparaginase as an Efficient and Safe Anti-Cancer Therapy](#), Cancers, 2022
- Wang et al., [Serum metabolite signatures of epithelial ovarian cancer based on targeted metabolomics](#), Clinica Chimica Acta, 2021
- Shen et al., [Asparagine Metabolism in Tumors Is Linked to Poor Survival in Females with Colorectal Cancer: A Cohort Study](#), Metabolites, 2021

Product pictures



Cross-validation of L-Asparation ELISA and LC/MS data in human plasma samples

Asn was quantified in human plasma samples from healthy subjects using IS-I-1600R ELISA kit or by LC/MS. Correlation study showed $R^2=0.9774$, thereby confirming the accuracy of the immunoassay.



Typical standard curve of Arginine ELISA

Contact information

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

<https://www.immusmol.com/shop/l-asparagine-elisa-kit/>