

# HomoArginine ELISA kit – High Sensitivity – Plasma & Serum

Ref: IS-I-0500R

HomoArginine (hArg) is a basic non-essential amino acid that exerts beneficial effects on vascular homeostasis, more likely through the increase of nitric oxide (NO) that can be explained through two mechanisms since hArg **i)** serves as a precursor of NO and **ii)** favors the elevation of L-Arg - main substrate of NO synthase - by inhibiting the enzyme Arginase.

The homoArginine (hArg) ELISA kit allows for the determination of hArg in **serum** and **plasma** samples working with a sample volume of 20µL. The kit is easy to implement and well suited for both preclinical and clinical studies.

**Sample type** Serum, Plasma

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**Capacity** 96 tests

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**Sensitivity** 125nM

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**Range** 0.32 - 12.5µM

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**Assay time** Sample preparation 3h, ELISA overnight

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**Reactivity** Reacts with all species

## INFORMATIONS

### Product overview

<b>Product name</b>	HomoArginine ELISA kit
<b>Description</b>	Competitive ELISA kit for the quantitative measurement of Homoarginine (hARG) in <b>serum</b> and <b>plasma</b> samples. <b>For research use only</b>
<b>Format</b>	96-well plate
<b>Samples</b>	Serum, Plasma
<b>Minimal sample volume</b>	20µL
<b>Reactivity</b>	Reacts with all species
<b>Standard range</b>	0.32 – 12.5µM
<b>Sensitivity</b>	125nM
<b>Specificity</b>	No significant cross-reactivity was observed with L-Arginine, Agmatine, L-Citruline, L-Ornithine, ADMA and SDMA
<b>Assay time</b>	Sample preparation 3h and ELISA overnight
<b>Storage</b>	Store at 2-8°C for up to 6 months
<b>Datasheets</b>	<a href="#">Instructions for use</a> , <a href="#">Material Safety Datasheet</a>

## PROTOCOLS

<b>Sample collection &amp; storage</b>	Serum: Do not use lipemic, haemolytic samples, as well as samples containing precipitates or fibrin strands Store samples at 2-8°C for up to 48h or -20°C for longer period (up to 6 months)
<b>Sample preparation</b>	Sample preparation (3 hours)
<b>ELISA</b>	Homoarginine antiserum overnight incubation, revelation and read steps (1h)
<b>Detailed protocol</b>	<a href="#">Download instructions for use</a>

## REFERENCES

### Selected articles on Homoarginine

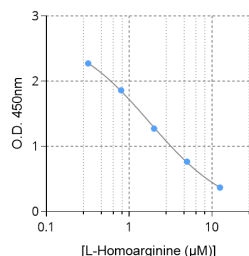
- [Karetnikova et al. Is Homoarginine a Protective Cardiovascular Risk Factor? Arterioscler Thromb Vasc Biol. 2019](#)
- [Wetzel et al. L-Homoarginine supplementation prevents diabetic kidney damage. Physiol Rep. 2019](#)
- [Helm et al. Plasma Homoarginine Concentrations According to Use of Hormonal Contraception. Sci Rep. 2018](#)
- [Atzler et al. L-homoarginine and cardiovascular disease. Curr Opin Clin Nutr Metab Care. 2015](#)

## Product pictures

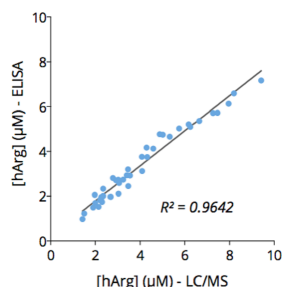


### Homoarginine (hARG) ELISA kit

Our 96-w plate format immunoassay works with a sample volume of 20 µL and presents a 125nM sensitivity. The assay has been cross-validated with LC/MS.



**Typical standard curve of Homoarginine ELISA**



### **Cross-validation of Homoarginine ELISA and LC/MS data in human plasma samples**

hArg was quantified in human plasma samples from 40 healthy subjects either using IS-I-0500 ELISA kit or by liquid chromatography-mass spectrometry (LC/MS). Correlation coefficient of 0.964 confirms the accuracy of the immunoassay.

## Contact information

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

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