

# KYNURENINE *ELISA*

BIOLOGICAL SAMPLES (SERUM, PLASMA, ETC...)

## ADVANTAGE

- Speed and ease of use
- Use with different biological samples (e.g. serum, plasma)
- Easy sample preparation (acylation)
- High sensitivity
- No known interferences by medical drugs
- No column purification or extra consumables needed
- Wide standard range without predilution
- Customer Service! – We use the kits we sell, and we always offer a 24 hour turn-around time on almost all technical questions

## SPECIFICITY

<u>SUBSTANCE</u>	<u>CROSS REACTIVITY (%)</u>
Tryptophan	0.25
3-Hydroxy-DL-Kynurenin	0.36
5-Hydroxy-DL-Tryptophan	0.05
Tyrosin	0.05
Phenylalanin	0.05
Serotonin	0.05
L-Asparagin	0.05
Kynurenic Acid	0.05

# KYNURENINE

## ESSENTIAL INFORMATION

The essential amino acid tryptophan is a constituent of proteins and is also a substrate for two important biosynthetic pathways: the generation of the neurotransmitter serotonin (5-hydroxytryptamine) and the formation of nicotinamide adenine dinucleotides via different kynurenine derivatives.

L-kynurenine is formed in the mammalian brain (40%) and is taken up from the periphery (60%), indicating that it can be transported across the blood-brain-barrier.

It can be converted by the inducible enzyme indoleamine 2,3-dioxygenase (IDO) into two other important compounds: the neuroprotective kynurenic acid and the neurotoxic quinolinic acid. The kynurenine pathway is also closely linked to the immune system, as different cytokines do influence the activity of the key enzymes.

An unbalanced tryptophan-kynurenine pathway is associated with different kind of diseases such as mental and psychotic disorders (e.g. depressions; Alzheimer's disease; Huntington's chorea), stress, and inflammatory neurological diseases (amyotrophic lateral sclerosis; ALS).

LDN has developed an Enzyme-Linked Immunosorbent Assay (ELISA) which is useful for measuring kynurenine levels under different healthy and pathological conditions.

## KYNURENINE ELISA



Enzyme-linked immunoassay for the quantitative determination of kynurenine in plasma and serum.



Easy sample preparation. Acylation in liquid phase. 96 wells per kit. 6 standards (do not change from lot to lot), 2 controls, ready for use.



Time: sample preparation 1.5 h and ELISA overnight.



Plasma and serum.

## KIT DETAILS KYNURENINE ELISA – TECHNICAL DATA

CAT NO.	SAMPLE SIZE	STANDARDS	SENSITIVITY	FORMAT
<b>BA E-2200</b>	<b>20 µl serum or plasma</b>	<b>0/100 - 10000 ng/ml</b>	45.7 ng/ml	<b>96 tests</b>

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