

Glutathione

Reduced L-glutathione, a tripeptide thiol

BATCH

IP-GT-261003 This is the code printed on your vial.

APPLICABLE STRENGTHS

600 mg

99.52%

HPLC WITH UV DETECTION

Specification ≥ 99.0%

IDENTITY

Confirmed

Mass spectrometry

ENDOTOXIN

< 0.05 EU/mg

Kinetic chromogenic LAL

STERILITY

No growth

Membrane filtration

ANALYSED

5 October 2026

Batch made 3 October 2026

Full analytical results

TESTS AND SPECIFICATIONS

Appearance

Visual inspection

SPECIFICATION White to off-white crystalline powder

RESULT **Conforms**

STATUS **PASS**

Purity

HPLC with UV detection

SPECIFICATION $\geq 99.0\%$

RESULT **99.52%**

STATUS **PASS**

Identity

ESI-MS

SPECIFICATION $[M+H]^+ = 308.33 \pm 0.50$

RESULT **308.40**

STATUS **PASS**

Identity

¹H NMR

SPECIFICATION Conforms to reference spectrum

RESULT **Conforms**

STATUS **PASS**

Related substances

HPLC, any single impurity

SPECIFICATION $\leq 0.5\%$

RESULT **0.28%**

STATUS **PASS**

Water content

Karl Fischer titration

SPECIFICATION $\leq 2.0\%$

RESULT **0.78%**

STATUS **PASS**

Residue on ignition

USP <281>

SPECIFICATION $\leq 0.1\%$

RESULT **0.012%**

STATUS **PASS**

Heavy metals

ICP-MS

SPECIFICATION ≤ 10 ppm

RESULT < 2 ppm

STATUS PASS

Bacterial endotoxins

Kinetic chromogenic LAL

SPECIFICATION < 1.0 EU/mg

RESULT < 0.05 EU/mg

STATUS PASS

Sterility

Membrane filtration (USP <71>)

SPECIFICATION No growth

RESULT No growth

STATUS PASS

Residual solvents

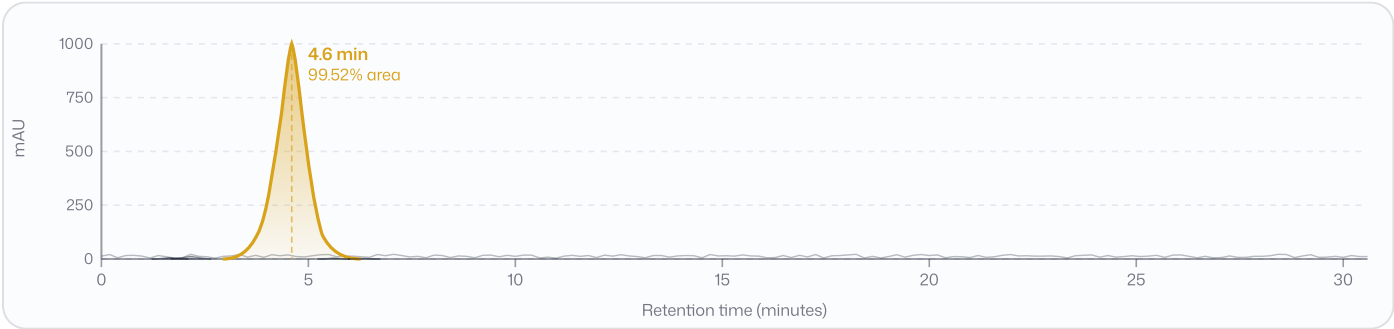
Headspace GC-FID (USP <467>)

SPECIFICATION Acetonitrile ≤ 410 ppm, methanol ≤ 3000 ppm, dichloromethane ≤ 600 ppm (ICH Q3C)

RESULT Conforms

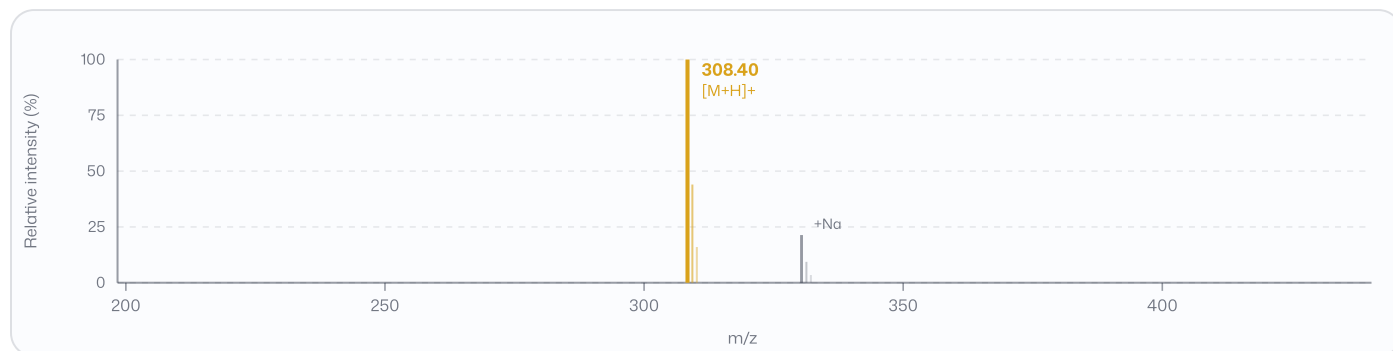
STATUS PASS

CHROMATOGRAM



HPLC trace for this batch. One dominant peak at 4.6 minutes, 99.52% of the total peak area, largest single impurity 0.28%.

MASS SPECTRUM



Electrospray ionisation. Expected 308.33, observed 308.40, a difference of 0.07 m/z at charge state 1. The smaller peak to its right is the sodium adduct, [M+Na]⁺, which electrospray produces alongside the protonated ion.

REFERENCE DATA

ALSO KNOWN AS

GSH

CAS NUMBER

70-18-8

MOLECULAR FORMULA

C₁₀H₁₇N₃O₆S

MOLECULAR WEIGHT

307.32 g/mol

SEQUENCE

gamma-Glu-Cys-Gly

MODIFICATIONS

The glutamate links through its gamma carboxyl rather than the alpha, so a one-letter code would misdescribe the molecule. The cysteine thiol is free, which is the reduced form; the single sulfur in the formula is itself the proof it is not the oxidised dimer.

Public reference values for the compound, not measurements on this batch. The batch measurements are in the table above.

STORAGE AND HANDLING

UNOPENED

2 to 8 °C, away from light and moisture

LONG TERM

-20 °C, for the stated shelf life

RECONSTITUTED

2 to 8 °C, use within 4 weeks

IN TRANSIT

Stable at ambient temperature for up to 30 days

RECONSTITUTE WITH

Bacteriostatic water

THE VIAL THIS COVERS



The label on your vial carries the same batch code as this certificate, **IP-GT-261003**, and the QR goes to the results for it. If the code on the vial is not this one, the certificate for it is on this page under earlier batches.

Sticker shown at its printed size, 40 by 20 mm.
Cap colour may vary by batch.

RELEASE

BATCH DATE

3 October 2026

ANALYSIS DATE

5 October 2026

ISSUE DATE

6 October 2026

BEST BEFORE

October 2028

RELEASED BY

Quality review, Indigo Peptides

DOCUMENT

Valid only in its original, unmodified form

Results are taken from the batch testing documentation for this exact batch, supplied with the finished vials and held on file by us. Every value above is for the batch named on this certificate and for no other.

HOLDING AN OLDER VIAL?

IP-GT-260912

PURITY

99.31%

ANALYSED

14 September 2026

If the code on your vial is one of these, it is an earlier batch of ours and these are its results. A result we have published is never removed and never recalculated.