



# L-Glutamine Solution, 200 mM

30-2214™

## Description

L-Glutamine 200 mM Solution (29.23 mg/mL). L-Glutamine is an essential amino acid required by virtually all mammalian and insect cells grown in culture. L-Glutamine is also more labile in cell culture solutions than other amino acids. The rate and extent of L-glutamine degradation are related to storage temperatures, age of the product, and pH.

All cell culture media are formulated to contain appropriate amounts of L-glutamine to support cell growth well beyond the expiration date of the media. However, if L-glutamine is suspected to be a limiting factor during cell culture, a simple test of 'spiking' the medium with a small amount of L-glutamine will determine whether or not more is required. Simply add a small amount of L-glutamine (~ 2 mM final concentration) to the culture medium. If the cell growth rate increases, L-glutamine is most likely deficient and more should be added. It has applications for cell culture, cell growth, and viability.

**Volume:** 100 mL

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## Storage Conditions

**Product format:** Frozen

**Storage conditions:** -20°C or colder

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## Intended Use

This product is intended for laboratory research use only. It is not intended for any animal or human therapeutic use, any human or animal consumption, or any diagnostic use.

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### BSL 1

ATCC determines the biosafety level of a material based on our risk assessment as guided by the current edition of *Biosafety in Microbiological and Biomedical Laboratories (BMBL)*, U.S. Department of Health and Human Services. It is your responsibility to understand the hazards associated with the material per your organization's policies and procedures as well as any other applicable regulations as enforced by your local or national agencies.

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### Certificate of Analysis

For batch-specific test results, refer to the applicable certificate of analysis that can be found at [www.atcc.org](http://www.atcc.org).

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### Quality Control Specifications

**Bacterial and fungal testing:** Not detected

**Mycoplasma contamination:** Not detected

**Endotoxin:** 0.25 EU/mL

**Osmolality:** 400 to 500 mOsm/kg

**pH:** 5.0 to 6.0

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### Notes

Added as a supplement to cell culture media. L-Glutamine is an essential amino acid required by virtually all mammalian and insect cells grown in culture. L-Glutamine is also more labile in cell culture solutions than other amino acids. The rate and extent of L-glutamine degradation are related to storage temperatures, age of the product, and pH.

**Note:** L-glutamine degradation results in the build-up of ammonia which can have a

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deleterious effect on some cell lines. Use caution when adding more L-glutamine than called for in the original medium formulation (2 to 4 mM is standard). For most cell lines, ammonia toxicity is more critical for cell viability than L-glutamine limitation.

For more information, please contact ATCC Technical Service.

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## Material Citation

If use of this material results in a scientific publication, please cite the material in the following manner: L-Glutamine Solution, 200 mM (ATCC 30-2214)

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## References

References and other information relating to this material are available at [www.atcc.org](http://www.atcc.org).

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Product Sheet

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## Revision

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