



3050 Spruce Street
Saint Louis, Missouri 63103 USA
Telephone 800-325-5832 • (314) 771-5765
Fax (314) 286-7828
email: techserv@sial.com
sigma-aldrich.com

Product Information

Glutaminase from *E. coli*

Product Number **G 8880**

Storage Temperature -0°C

E.C. 3.5.1.2

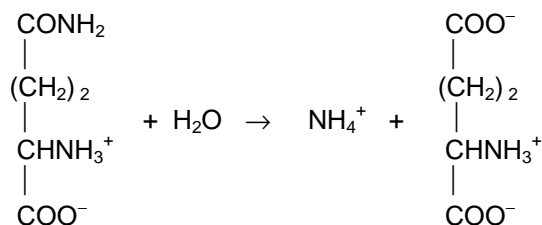
CAS[#] 9001-47-2

Synonym: L-Glutamine amidohydrolase

Product Description

This enzyme belongs to the subclass of the amidohydrolases acting on linear amide substrates. It has a molecular weight of approximately 110 kDa (gel filtration).

The enzyme catalyzes the hydrolysis of L-glutamine to L-glutamic acid and an ammonium ion.



The product is supplied as a lyophilized powder containing potassium succinate and EDTA. The protein content is approximately 30% (Biuret). The ammonium ion content is less than 0.1 $\mu\text{g}/\text{unit}$ and NADH oxidase activity is less than 0.01%.

Specific Activity: 50-200 units/mg protein.

Unit definition: One unit will deaminate 1.0 μmole of L-glutamine per minute at pH 4.9 and 37°C .

Precautions and Disclaimer

This product is for laboratory research use only. Please consult the Material Safety Data Sheet for information regarding hazards and safe handling practices.

Preparation Instructions

The product may be dissolved in 5 mM sodium acetate buffer, pH 6.0.

Storage/Stability

It is recommended to store the product at -0°C .

References

1. Kung, H.-F., and Wagner, C., J. Biol. Chem., **244**, 4136 (1969).
2. Roberts, E., in The Enzymes, Second Edition, Boyer, P.D., et al., eds., Academic Press (New York, NY: 1960), vol. 4, p. 285.
3. Hartman, S.C., and Stochaj, E.M., J. Biol. Chem., **248**, 8511 (1973).
4. Hartman, S.C., Methods in Enzymology, **17(A)**, 941 (1970).

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