Catalog Number: 100570, 194049, 194681, 194825, 808822, 808831 Glycine

Structure:

Molecular Formula: C₂H₅NO₂

Molecular Weight: 75.07

CAS #: 56-40-6

Synonyms: Aminoacetic acid; Gly; Aminoethanoic acid; Glycocoll; G

Solubility: Soluble in water (250 mg/ml @ 25°C; 672 mg/ml @ 100°C); slightly soluble in alcohol and ethanol(95%); almost insoluble in ether.¹

Description: A non-essential amino acid. Only amino acid with no asymmetric carbon.¹ Major inhibitory neurotransmitter.¹ Commonly used as a component in Tris-glycine and Tris-glycine-SDS running buffers for polyacrylamide gel electrophoresis^{6,7,8}, a component of Towbin's transfer buffer for Western blots¹⁰, a buffer substance in cryoenzymology⁵, in osmotic pressure maintenance in isoelectric focusing of erythrocytes⁹, salting-in effect in protein chemistry³, and as a buffer component in the coupled phosphatase-kinase reaction for end labelling of restriction fragments.⁴ The growth requirements of various microorganisms is reported in the Handbook of Microbiology.²

Availability:

Catalog Number	Description	Size
100570	Glycine	500 g 1 kg 5 kg 25 kg
194681	Glycine, cell culture reagent	100 g 500 g 1 kg 5 kg
194825	Glycine, molecular biology reagent	100 g 500 g 1 kg 5 kg
194049	Glycine, ACS Reagent Grade, purity not less than 98.5%	50 g 250 g 1 kg
808822 808831	Glycine, electrophoresis grade, purity approximately 99.5%	1 kg 5 kg

References:

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- 4. Cobianchi, F. and Wilson, S.H., Meths. Enzymol., v. 152, 101 (1987).
- 5. Fink, A.L., Geeves, M.A., Meths. Enzymol., v. 63, 336 (1979).
- 6. Hames, B.D. and Rickwood, D., *Gel Electrophoresis of Proteins: A Practical Approach, 2nd ed.*, IRL Press: New York, New York, p. 32-35 (1990).
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- 10. Towbin, H., et al., "Electrophoretic transfer of proteins from polyacrylamide gels to nitrocellulose sheets: procedure and some applications." *Proc. Natl. Acad. Sci. USA*, **v. 76**, 4350-4354 (1979).