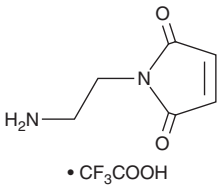
PRODUCT INFORMATION

N-(2-Aminoethyl)maleimide (trifluoroacetate salt)

Item No. 30530

CAS Registry No.: 146474-00-2
Formal Name: 1-(2-aminoethyl)-1H-pyrrole-2,5-dione, 2,2,2-monotrifluoroacetate
Synonym: 2-Maleimidoethylamine
MF: $C_6H_8N_2O_2 \bullet CF_3COOH$
FW: 254.2
Purity: ≥95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

N-(2-Aminoethyl)maleimide (trifluoroacetate salt) is supplied as a crystalline solid. A stock solution may be made by dissolving the N-(2-aminoethyl)maleimide (trifluoroacetate salt) in the solvent of choice, which should be purged with an inert gas. N-(2-Aminoethyl)maleimide (trifluoroacetate salt) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of N-(2-aminoethyl)maleimide (trifluoroacetate salt) in these solvents is approximately 30 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of N-(2-aminoethyl)maleimide (trifluoroacetate salt) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of N-(2-aminoethyl)maleimide (trifluoroacetate salt) in PBS (pH 7.2), is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

N-(2-Aminoethyl)maleimide is a thiol-reactive cross-linking agent.[1,2] It has been used in the synthesis of maleimide-functionalized heparin hydrogels in the development of growth factor delivery systems and radiotracers for thiol-mediated protein labelling.

References

1. Nie, T., Baldwin, A.C., Yamaguchi, N., *et al*. Production of heparin-functionalized hydrogels for the development of responsive and controlled growth factor delivery systems. *J. Control Release* **122(3)**, 287-296 (2007).
2. Kratz, H., Haeckel, A., Michel, R.P., *et al*. Straightforward thiol-mediated protein labelling with DTPA: Synthesis of a highly active ^{111}In-annexin A5-DTPA tracer. *EJNMMI Res*. **2(1)**, 17 (2012).

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