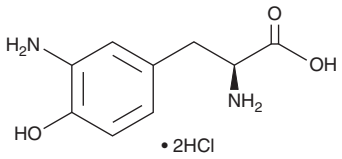
PRODUCT INFORMATION

3-amino-L-Tyrosine (hydrochloride)

Item No. 36310

CAS Registry No.:	23279-22-3
Synonym:	3-Aminotyrosine
MF:	$C_9H_{12}N_2O_3$ • 2HCl
FW:	269.1
Purity:	≥95%
Supplied as:	A 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

3-amino-L-Tyrosine (hydrochloride) is supplied as a solid. A stock solution may be made by dissolving the 3-amino-L-tyrosine (hydrochloride) in the solvent of choice, which should be purged with an inert gas. 3-amino-L-Tyrosine (hydrochloride) is soluble in the organic solvent DMSO. The solubility of 3-amino-L-tyrosine (hydrochloride) in DMSO is approximately 1 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 3-amino-L-tyrosine (hydrochloride) can be prepared by directly dissolving the solid in aqueous buffers. The solubility of 3-amino-L-tyrosine (hydrochloride) in PBS (pH 7.2) is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

3-amino-L-Tyrosine is a derivative of L-tyrosine.[1] It completely inhibits the growth of a tyrosine-sensitive mutant of *N. crassa* when used at a concentration of 400 µM.[2] 3-amino-L-Tyrosine (200-400 µg/ml) is cytotoxic to KG-1 leukemia cells.[3] Dietary administration of 3-amino-L-tyrosine decreases fecundity and hatchability of eggs of the olive fruit fly *B. oleae* when used at a concentration of 0.01 g/100 ml, as well as survival of adult *B. oleae* when used at a concentration of 6 g/100 ml.[1]

References

1. Zografou, E.N., Tsiropoulos, G.J., and Margaritis, L.H. Effect of phenylalanine and tyrosine analogues on *Bactrocera oleae* Gmelin (Dipt., Tephritidae) reproduction. *J. Appl. Entomol.* **125**, 365-369 (2001).
2. Wolfinbarger Jr., L. and Marzluf, G.A. Characterization of a mutant of *Neurospora crassa* sensitive to L-tyrosine. *J. Gen. Microbiol.* **93(1)**, 189-193 (1976).
3. Bruno, J.G., Herman, T.S., Cano, V.L., *et al.* Selective cytotoxicity of 3-amino-L-tyrosine correlates with peroxidase activity. *In Vitro Cell. Dev. Biol. Anim.* **35(7)**, 376-382 (1999).

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