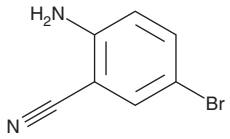
PRODUCT INFORMATION

2-Amino-5-bromo-benzonitrile

Item No. 30454

CAS Registry No.: 39263-32-6
Formal Name: 2-amino-5-bromo-benzonitrile
Synonym: NSC-263786
MF: $C_7H_5BrN_2$
FW: 197.0
Purity: ≥95%
UV/Vis.: λ_{max}: 218, 257 nm
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

2-Amino-5-bromo-benzonitrile is supplied as a crystalline solid. A stock solution may be made by dissolving the 2-amino-5-bromo-benzonitrile in the solvent of choice, which should be purged with an inert gas. 2-Amino-5-bromo-benzonitrile is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 2-amino-5-bromo-benzonitrile in these solvents is approximately 30 mg/ml.

2-Amino-5-bromo-benzonitrile is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 2-amino-5-bromo-benzonitrile should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. 2-Amino-5-bromo-benzonitrile has a solubility of approximately 0.25 mg/ml in a 1:3 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

2-Amino-5-bromo-benzonitrile is a heterocyclic building block.[1,2] It has been used in the synthesis of copper-ligand coordination complexes and 4-amino-3-benzimidazol-2-ylhydroquinolin-2-one-based multi-targeted receptor tyrosine kinase (RTK) inhibitors with anticancer activity.

References

1. Primik, M.F., Göschl, S., Jakupec, M.A., *et al.* Structure-activity relationships of highly cytotoxic copper(II) complexes with modified indolo[3,2-c]quinoline ligands. *Inorg. Chem.* **49(23)**, 11084-11095 (2010).
2. Renhowe, P.A., Pecchi, S., Shafer, C.M., *et al.* Design, structure-activity relationships and in vivo characterization of 4-amino-3-benzimidazol-2-ylhydroquinolin-2-ones: A novel class of receptor tyrosine kinase inhibitors. *J. Med. Chem.* **52(2)**, 278-292 (2009).

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