

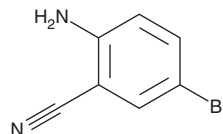
# PRODUCT INFORMATION



## 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:**  $\geq 95\%$   
**UV/Vis.:**  $\lambda_{max}$ : 218, 257 nm  
**Supplied as:** A crystalline solid  
**Storage:**  $-20^\circ\text{C}$   
**Stability:**  $\geq 4$  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.<sup>1,2</sup> 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).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897  
[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM  
[WWW.CAYMANCHEM.COM](http://WWW.CAYMANCHEM.COM)