

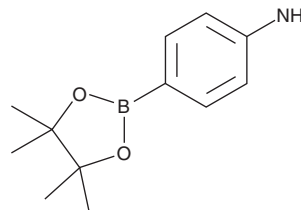
# PRODUCT INFORMATION



## 4-(4,4,5,5-Tetramethyl-1,3,2-dioxaboran-2-yl)aniline

Item No. 30402

**CAS Registry No.:** 214360-73-3  
**Formal Name:** 4-(4,4,5,5-tetramethyl-1,3,2-dioxaborolan-2-yl)-benzenamine  
**Synonym:** 4-Aminophenylboronic Acid pinacol ester  
**MF:** C<sub>12</sub>H<sub>18</sub>BNO<sub>2</sub>  
**FW:** 219.1  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 262 nm  
**Supplied as:** A solid  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

4-(4,4,5,5-Tetramethyl-1,3,2-dioxaboran-2-yl)aniline is supplied as a solid. A stock solution may be made by dissolving the 4-(4,4,5,5-tetramethyl-1,3,2-dioxaboran-2-yl)aniline in the solvent of choice, which should be purged with an inert gas. 4-(4,4,5,5-Tetramethyl-1,3,2-dioxaboran-2-yl)aniline is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 4-(4,4,5,5-tetramethyl-1,3,2-dioxaboran-2-yl)aniline in these solvents is approximately 3, 10, and 20 mg/ml, respectively.

4-(4,4,5,5-Tetramethyl-1,3,2-dioxaboran-2-yl)aniline is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, 4-(4,4,5,5-tetramethyl-1,3,2-dioxaboran-2-yl)aniline should first be dissolved in DMF and then diluted with the aqueous buffer of choice. 4-(4,4,5,5-Tetramethyl-1,3,2-dioxaboran-2-yl)aniline has a solubility of approximately 0.16 mg/ml in a 1:5 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

### Description

4-(4,4,5,5-Tetramethyl-1,3,2-dioxaboran-2-yl)aniline is a heterocyclic building block.<sup>1,2</sup> It has been used in the synthesis of 3-aminoindazole-based multi-targeted receptor tyrosine kinase (RTK) inhibitors with anticancer activity and roscovitine derivatives that are dual inhibitors of cyclin-dependent kinases (CDKs) and casein kinase 1 (CK1).

### References

1. Dai, Y., Hartandi, K., Ji, Z., *et al.* Discovery of *N*-(4-(3-amino-1*H*-indazol-4-yl)phenyl)-*N'*-(2-fluoro-5-methylphenyl)urea (ABT-869), a 3-aminoindazole-based orally active multitargeted receptor tyrosine kinase inhibitor. *J. Med. Chem.* **50**(7), 1584-1597 (2007).
2. Paraiso, K.H.T., Haarberg, H.E., Wood, E., *et al.* The HSP90 inhibitor XL888 overcomes BRAF inhibitor resistance mediated through diverse mechanisms. *Clin. Cancer Res.* **18**(9), 2502-2514 (2012).

**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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