

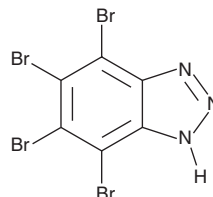
PRODUCT INFORMATION



TBB

Item No. 14453

CAS Registry No.: 17374-26-4
Formal Name: 4,5,6,7-tetrabromo-1H-benzotriazole
Synonyms: NSC 231634,
Tetrabromobenzotriazole
MF: $C_6HBr_4N_3$
FW: 434.7
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 223, 276 nm
Supplied as: A crystalline solid
Storage: $-20^\circ C$
Stability: ≥ 4 years



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

Laboratory Procedures

TBB is supplied as a crystalline solid. A stock solution may be made by dissolving the TBB in the solvent of choice. TBB is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of TBB in these solvents is approximately 5, 14, and 20 mg/ml. respectively.

TBB is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, TBB should first be dissolved in DMF and then diluted with the aqueous buffer of choice. TBB has a solubility of approximately 0.5 mg/ml in a 1:1 solution of DMF:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

TBB is an ATP/GTP-competitive inhibitor of casein kinase 2 (CK2; $IC_{50} = 0.15 \mu M$ for rat liver CK2).¹ It also inhibits PIM3 and DYRK2 with IC_{50} values of 0.86 and 0.99 μM , respectively, and several other protein kinases with IC_{50} values in the low micromolar range but displays less than 10% inhibition at 26 additional kinases up to 10 μM .^{1,2}

References

1. Sarno, S., Reddy, H., Meggio, F., *et al.* Selectivity of 4,5,6,7-tetrabromobenzotriazole, an ATP site-directed inhibitor of protein kinase CK2 ('casein kinase-2'). *FEBS Letters* **496**(1), 44-48 (2001).
2. Pagano, M.A., Bain, J., Kazimierczuk, Z., *et al.* The selectivity of inhibitors of protein kinase CK2: An update. *Biochem. J.* **415**(3), 353-365 (2008).

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