# **PRODUCT** INFORMATION



## 4,5,6,7-Tetrabromobenzimidazole

Item No. 18886

CAS Registry No.:	577779-57-8	
Formal Name:	4,5,6,7-tetrabromo-1H-benzimidazole	Br H
Synonyms:	Casein Kinase II Inhibitor XII, TBBz	Br.
MF:	$C_7 H_2 Br_4 N_2$	
FW:	433.7	
Purity:	≥98%	Br
Supplied as:	A crystalline solid	2.
Storage:	-20°C	Br
Stability:	≥4 years	
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

#### Laboratory Procedures

4,5,6,7-Tetrabromobenzimidazole (TBBz) is supplied as a crystalline solid. A stock solution may be made by dissolving the TBBz in the solvent of choice, which should be purged with an inert gas. TBBz is soluble in organic solvents such as ethanol and DMSO.

#### Description

Casein kinase 2 (CK2) is a constitutive protein kinase involved in many signal transduction pathways. CK2 is known to negatively regulate apoptosis, and its activity is increased in many proliferating tissues and tumors. TBBz is a selective, ATP-competitive inhibitor of CK2 with  $K_i$  values ranging from 0.5-1  $\mu$ M in rat liver, S. cerevisiae, C. tropicalis, and N. crassa.<sup>1</sup> It is inactive against PKA and PKC and a relatively weak inhibitor of CK1 (K<sub>i</sub> = 54.4-64.2 μM).<sup>1</sup>

#### Reference

1. Zien, P., Bretner, M., Zastapilo, K., et al. Selectivity of 4,5,6,7-tetrabromobenzimidazole as an ATP-competitive potent inhibitor of protein kinase CK2 from various sources. Biochem. Biophys. Res. Commun. 306(1), 129-133 (2003).

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.

#### WARRANTY AND LIMITATION OF REMEDY

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