

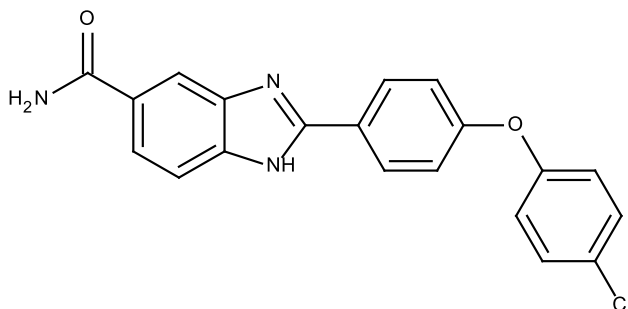
**Catalog # 10-1024**

**BML-277**

CAS# 516480-79-8

2-(4-(4-Chlorophenoxy)phenyl)-1H-benzimidazole-5-carboxamide

Lot # FBM2161



Potent selective inhibitor of Chk2 ( $IC_{50} = 15$  nM). BML-277 has been screened against a panel of 35 kinases, and shows less than 25% inhibition of any other kinase at  $10 \mu M$ . Also displays radioprotective activity, preventing apoptosis in human T-cells that were subjected to ionizing radiation ( $EC_{50} = 3.0 - 7.6 \mu M$ ).

- 1) Arienti *et al.* (2005), *Checkpoint kinases inhibitors: SAR and radioprotective properties of a series of 2-arylbenzimidazoles*; J. Med. Chem., **48** 1873
- 2) Pereg *et al.* (2006), *Differential roles of ATM- and Chk2-mediated phosphorylations of Hdmx in response to DNA damage.*; Mol. Cell. Biol., **26** 6819

**PHYSICAL DATA**

Molecular Weight:	363.81
Molecular Formula:	$C_{20}H_{14}ClN_3O_2$
Purity:	98% by TLC [50% Ethyl acetate/ hexanes; $R_f = 0.17$ ] NMR: (Conforms)
Solubility:	DMSO (up to 20 mg/ml), or ethanol (up to 20 mg/ml)
Physical Description:	Off-white solid
Storage and Stability:	Store as supplied at $-20^\circ C$ for up to 1 year from the date of purchase. Solutions in DMSO or ethanol may be stored at $-20^\circ C$ for up to 3 months.

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