PRODUCT INFORMATION



CAY10578

Item No. 10011264

CAS Registry No.: 19231-60-8

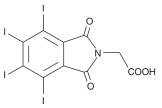
Formal Name: 4,5,6,7-tetraiodo-1,3-dioxo-2-

isoindolineacetic acid

MF: $C_{10}H_3I_4NO_4$ FW: 708.8 **Purity:** ≥95% λ_{max} : 263 nm A crystalline solid UV/Vis.: Supplied as:

-20°C Storage: Stability: ≥4 years

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



Laboratory Procedures

CAY10578 is supplied as a crystalline solid. A stock solution may be made by dissolving the CAY10578 in the solvent of choice, which should be purged with an inert gas. CAY10578 is soluble in organic solvents such as DMSO and dimethyl formamide (DMF). The solubility of CAY10578 in these solvents is approximately 5 and 10 mg/ml, respectively.

CAY10578 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, CAY10578 should first be dissolved in DMF and then diluted with the aqueous buffer of choice. CAY10578 has a solubility of approximately 0.15 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

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, which lends promise as an anticancer drug target. CAY10578 is a potent inhibitor of CK2 with an IC_{50} value of 0.3 μ M.¹ This compound is ATP competitive, displaying a K, value of 0.2 μ M and only minimally inhibits the activities of other protein kinases (e.g., GSK3, Cdk5, and MSK1).1

Reference

1. Golub, A.G., Yakovenko, O.Y., Prykhod'ko, A.O., et al. Evaluation of 4,5,6,7-tetrahalogeno-1H-isoindole-1,3(2H)-diones as inhibitors of human protein kinase CK2. Biochem. Biophys. Acta 1784(1), 143-149 (2008).

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

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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