

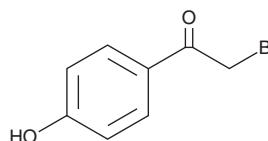
PRODUCT INFORMATION



PTP Inhibitor I

Item No. 19766

CAS Registry No.: 2491-38-5
Formal Name: 2-bromo-1-(4-hydroxyphenyl)-ethanone
Synonyms: α -Bromo-4-hydroxyacetophenone,
2-Bromo-4'-hydroxyacetophenone,
4-Hydroxyphenacyl bromide,
Protein Tyrosine Phosphatase Inhibitor I
SHP-1 Inhibitor II
MF: C₈H₇BrO₂
FW: 215.0
Purity: \geq 98%
UV/Vis.: λ_{max} : 226, 290 nm
Supplied as: A crystalline solid
Storage: Room temperature
Stability: \geq 4 years



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

Laboratory Procedures

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

PTP Inhibitor I is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, PTP inhibitor I should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. PTP Inhibitor I has a solubility of approximately 0.09 mg/ml in a 1:10 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

PTP inhibitor I is an inhibitor of Src homology region 2 domain-containing phosphatase 1 (SHP-1) and protein tyrosine phosphatase 1B (PTP1B; K_i s = 43 and 42 μ M for the SHP-1 catalytic domain and full-length PTP1B, respectively).¹ It inhibits endothelial cell network formation of human umbilical vein endothelial cells (HUVECs) cultured with normal human dermal fibroblasts (IC_{50} = 3.7 μ M).² PTP inhibitor I has been used in the synthesis of compounds with antibacterial, antifungal, fungicidal, and anticancer activities.³

References

1. Arabaci, G., Guo, X.-C., Beebe, K.D., *et al.* α -Haloacetophenone derivatives as photoreversible covalent inhibitors of protein tyrosine phosphatases. *J. Am. Chem. Soc.* **121(21)**, 5085-5086 (1999).
2. Sylvest, L., Bendiksen, C.D., and Houen, G. Phosphatase inhibitors with anti-angiogenic effect *in vitro*. *APMIS* **118(1)**, 49-59 (2009).
3. Prasad, Y.R., Kumar, G.V.S., and Chandrashekar, S.M. Synthesis and biological evaluation of novel 4,5-dihydropyrazole derivatives as potent anticancer and antimicrobial agents. *Med. Chem. Res.* **22**, 2061-2078 (2013).

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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