

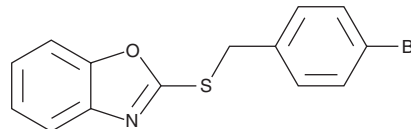
PRODUCT INFORMATION



SB-4

Item No. 37748

CAS Registry No.: 100874-08-6
Formal Name: 2-[[[4-bromophenyl)methyl]thio]-benzoxazole
MF: C₁₄H₁₀BrNOS
FW: 320.2
Purity: ≥98%
Supplied as: A solid
Storage: -20°C
Stability: ≥4 years



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

Laboratory Procedures

SB-4 is supplied as a solid. A stock solution may be made by dissolving the SB-4 in the solvent of choice, which should be purged with an inert gas. SB-4 is soluble in methanol.

Description

SB-4 is an activator of bone morphogenetic protein 4 (BMP4) signaling.¹ It induces BMP4 signaling in a reporter assay using HEK293 cells expressing a recombinant human BMP4 response element (EC₅₀ = 74 nM). SB-4 (10 μM) increases phosphorylation of SMAD1, -5, and -9 in HEK293 cells. It also induces *Blimp1* and *Tfap2c* expression, markers of germline differentiation, in mouse embryonic stem cells.²

References

1. Bradford, S.T.J., Ranghini, E.J., Grimley, E., *et al.* High-throughput screens for agonists of bone morphogenetic protein (BMP) signaling identify potent benzoxazole compounds. *J. Biol. Chem.* **294**(9), 3125-3136 (2019).
2. Tehrani, R.S.H., Sayahpour, F.A., and Esfandiari, F. A comparison between BMP4 and SB4 in inducing germ line gene expression pattern during embryonic stem cells differentiation. *Differentiation* **123**, 9-17 (2022).

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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