

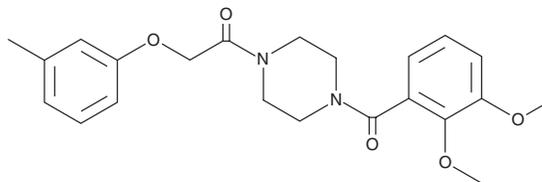
Product Information



MS37452

Item No. 17533

CAS Registry No.: 423748-02-1
Formal Name: 1-[4-(2,3-dimethoxybenzoyl)-1-piperazinyl]-2-(3-methylphenoxy)ethanone
MF: C₂₂H₂₆N₂O₅
FW: 398.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that MS37452 be stored as supplied at -20°C. It should be stable for at least two years. MS37452 is supplied as a crystalline solid. A stock solution may be made by dissolving the MS37452 in the solvent of choice. MS37452 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of MS37452 in these solvents is approximately 30 mg/ml.

MS37452 is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, MS37452 should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. MS37452 has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

Chromobox homolog 7 (CBX7) functions through its N-terminal chromodomain, which recognizes histone 3 trimethyl lysine 27 (H3K27me3), to repress gene transcription. It plays a key role in gene transcription in cellular processes related to stem cell self-renewal and differentiation, as well as tumor progression.¹ MS37452 is a competitive inhibitor of CBX7 chromodomain binding to H3K27me3 (K_i = 43 μM).¹ At 250 μM, it has been shown to derepress transcription of the polycomb repressive complex target gene *p16/CDKN2A* in prostate cancer cells.¹

Reference

1. Ren, C., Morohashi, K., Plotnikov, A.N., *et al.* Small-molecule modulators of methyl-lysine binding for the CBX7 chromodomain. *Chem. Biol.* **22**, 161-168 (2015).

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. 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

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery**.

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