

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

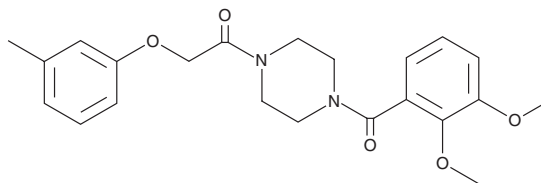
FW: 398.5

Purity: ≥98%

Supplied as: A crystalline 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

MS37452 is supplied as a crystalline solid. A stock solution may be made by dissolving the MS37452 in the solvent of choice, which should be purged with an inert gas. MS37452 is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. 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 ($K_i = 43 \mu\text{M}$).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 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

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 12/02/2022

CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897
[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM
WWW.CAYMANCHEM.COM