

Catalog # 10-3601 IMR-1

CAS# 310456-65-6
2-[2-Methoxy-4-[(4-oxo-2-thioxo-5-thiazolidinylidene)methyl]phenoxy]-acetic acid ethyl ester
Lot # S105043

Inhibitor of Mastermind Recruitment-1 (IMR-1) disrupts the recruitment of Mastermind-like 1 to the Notch transcriptional activation complex (NTC) on chromatin, which attenuates Notch target gene transcription¹. IC_{50} =26 μ M (*in vitro* assay). IMR-1 inhibits the growth of Notch-dependent cell lines and attenuates the growth of patient-derived tumor xenografts. The ethylester is hydrolyzed by intracellular esterases which produces the free acid compound (IMR-1A), IC_{50} =0.5 μ M (*in vitro* assay). Binding of IMR-1 to NTC is non-covalent and reversible.¹

1) Austudilo et al. (2016), The Small Molecule IMR-1 Inhibits the Notch Transcriptional Activation Complex to Suppress Tumorigenesis; Cancer Res., **76** 3593

PHYSICAL DATA

Molecular Weight: 353.41

Molecular Formula: C₁₅H₁₅NO₅S₂ Purity: 98% by TLC

NMR: (Conforms)

Solubility: DMSO (up to 45 mg/ml) or Ethanol (up to 9 mg/ml with warming)

Physical Description: Yellow solid

Storage and Stability: Store as supplied desiccated at -20°C for up to 2 years from the date of purchase. Solutions in

DMSO or ethanol may be stored at -20°C for up to 1 month.

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