

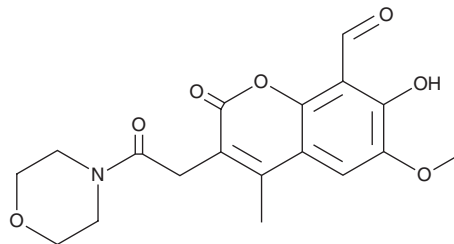
PRODUCT INFORMATION



MKC8866

Item No. 37332

CAS Registry No.: 1338934-59-0
Formal Name: 7-hydroxy-6-methoxy-4-methyl-3-[2-(4-morpholinyl)-2-oxoethyl]-2-oxo-2H-1-benzopyran-8-carboxaldehyde
Synonyms: Inositol-Requiring Enzyme 1 α Inhibitor 8866, IRE1-IN-8866
MF: C₁₈H₁₉NO₇
FW: 361.4
Purity: $\geq 98\%$
UV/Vis.: λ_{max} : 259, 288, 324, 367 nm
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

MKC8866 is supplied as a solid. A stock solution may be made by dissolving the MKC8866 in the solvent of choice, which should be purged with an inert gas. MKC8866 is soluble in the organic solvent dimethyl formamide (sonicated) at a concentration of approximately 1 mg/ml.

Description

MKC8866 is an inhibitor of inositol-requiring enzyme 1 α (IRE1 α) RNase activity (IC_{50} = 0.29 μ M).¹ It inhibits DTT-induced production of the IRE1 α target protein and transcription factor X-box binding protein 1 (XBP1) in MM.1S multiple myeloma cells (EC_{50} = 0.52 μ M) and XBP1 production induced by thapsigargin (Item No. 10522) in LNCaP cells (IC_{50} = 0.38 μ M). MKC8866 also decreases expression of the XBP1 target genes *SREBF1*, *DGAT2*, and *LIPE* and increases triglyceride levels in MDA-MB-231 cells.² *In vivo*, MKC8866 (300 mg/kg) reduces tumor volume in LNCaP, VCaP, 22Rv1, and C4-2B prostate cancer mouse xenograft models.¹

References

- Sheng, X., Nenseth, H.Z., Qu, S., *et al.* IRE1 α -XBP1s pathway promotes prostate cancer by activating c-MYC signaling. *Nat. Commun.* **10**(1), 323 (2019).
- Almanza, A., Mnich, K., Blomme, A., *et al.* Regulated IRE1 α -dependent decay (RIDD)-mediated reprogramming of lipid metabolism in cancer. *Nat. Commun.* **13**(1), 2493 (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.

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