

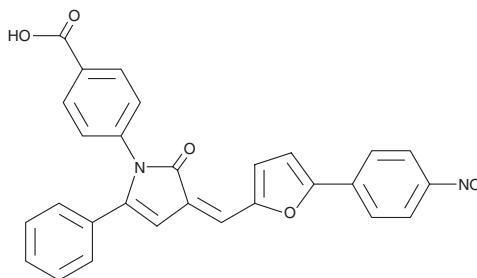
PRODUCT INFORMATION



4E1RCat

Item No. 18399

CAS Registry No.: 328998-25-0
Formal Name: 4-[2,3-dihydro-3-[[5-(4-nitrophenyl)-2-furanyl]methylene]-2-oxo-5-phenyl-1H-pyrrol-1-yl]-benzoic acid
Synonyms: eIF4E/eIF4G Interaction Inhibitor II
MF: C₂₈H₁₈N₂O₆
FW: 478.5
Purity: ≥98%
UV/Vis.: λ_{max}: 284, 388, 467 nm
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

4E1RCat is supplied as a crystalline solid. A stock solution may be made by dissolving the 4E1RCat in the solvent of choice. 4E1RCat is soluble in organic solvents such as DMSO and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of 4E1RCat in these solvents is approximately 10 and 5 mg/ml, respectively.

4E1RCat is sparingly soluble in aqueous solutions. To enhance aqueous solubility, dilute the organic solvent solution into aqueous buffers or isotonic saline. If performing biological experiments, ensure the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

Description

4E1RCat is an inhibitor of the eIF4F translation initiation complex that blocks eIF4E:eIF4G and eIF4E:4E-BP1 interactions.¹ It has been shown to prevent the assembly of the eIF4F complex and to inhibit cap-dependent translation with an IC₅₀ value of ~4 μM.¹ 4E1RCat was shown to reverse tumor chemoresistance in a mouse model of lymphoma by sensitizing cells to the proapoptotic action of DNA damage.¹

Reference

1. Cencic, R., Hall, D.R., Robert, F., *et al.* Reversing chemoresistance by small molecule inhibition of the translation initiation complex eIF4F. *Proc. Natl. Acad. Sci. USA* **108**(3), 1046-1051 (2011).

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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