4EGI-1

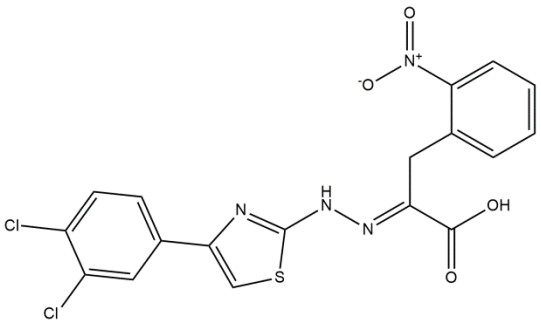
08/19

ALTERNATE NAMES: (2E)-2-[[4-(3,4-dichlorophenyl)-1,3-thiazol-2-yl]hydrazinylidene]-3-(2-nitrophenyl)propanoic acid; 4tpw; α-[2-[4-(3,4-dichlorophenyl)-2-thiazolyl]hydrazinylidene]-2-nitro-benzenepropanoic acid; AC1NX1IT; AMBZ0333; (E)-2-(2-(4-(3,4-Dichlorophenyl)thiazol-2-yl)hydrazono)-3-(2-nitrophenyl)propanoic acid; eIF4E/eIF4G Interaction Inhibitor

CATALOG #:

B2901-1	1 mg
B2901-5	5 mg

STRUCTURE:



MOLECULAR FORMULA: $C_{18}H_{12}Cl_2N_4O_4S$

MOLECULAR WEIGHT: 451.28

CAS NUMBER: 315706-13-9

APPEARANCE: A crystalline solid

PURITY: ≥95%

SOLUBILITY: ~30 mg/ml in DMSO and DMF

DESCRIPTION: 4EGI-1 is an inhibitor of the interaction of translation initiation factor eIF4G to eIF4E. It inhibits the binding of eIF4G to eIF4E, but not 4E-BP1. The K_D for eIF4E binding to 4EGI-1 is 25 µM ± 11 µM. It inhibits proliferation of human cancer cells. It reduces the expression of c-Myc, Cyclin D1, Cyclin E, Bcl-2, bFGF and Survivin in human melanoma cells at a concentration of 50 µM. It strongly inhibits tumor growth in xenograft models of human breast and melanoma cancers.

STORAGE TEMPERATURE: -20ºC. Store in the dark. Product is light sensitive.

HANDLING: Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

REFERENCES:

1. Moerke, N.J., Aktas, H., Chen, H., et al. Small-molecule inhibition of the interaction between the translation initiation factors eIF4E and eIF4G. Cell 128(2), 257-267 (2007).
2. Chen, L., Aktas, B.H., Wang, Y., et al. Tumor suppression by small molecule inhibitors of translation initiation. Oncotarget 3(8), 869-881 (2012).

RELATED PRODUCTS:

Clindamycin hydrochloride (Cat. No. 2627)
Emetine dihydrochloride (Cat. No. 1970)
Cycloheximide (Cat. No. 1041)
Blasticidin S Hydrochloride (Cat. No. 1859)
Aurodox (Cat. No. 2317)

DISCLAIMER: ***FOR RESEARCH USE ONLY! Not to be used on humans.***