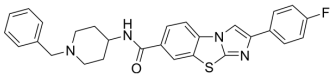
E235

Cat. No.:	HY-153339
CAS No.:	891894-69-2
Molecular Formula:	$C_{28}H_{25}FN_4OS$
Molecular Weight:	484.59
Target:	Others
Pathway:	Others

Storage:

Powder	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 10 mg/mL (20.64 mM; ultrasonic and warming and heat to 60°C)
H_2O : < 0.1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	2.0636 mL	10.3180 mL	20.6360 mL
5 mM	0.4127 mL	2.0636 mL	4.1272 mL
10 mM	0.2064 mL	1.0318 mL	2.0636 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: 1 mg/mL (2.06 mM); Suspended solution; Need ultrasonic

BIOLOGICAL ACTIVITY

Description

E235 is an expression regulator of activates transcription factor 4 (ATF4). E235 reduces cell viability by activating integrated stress response (ISR) and DNA damage response signals. E235 has anti-proliferative activity and can be used for tumor research[1].

IC_{50} & Target

Activates transcription factor 4, ATF4[1]

In Vitro

E235 (1 μM; 2, 4, 8, 16 or 24 h) down-regulates the level of XBP-1s mRNA in HT1080 cells with time dependent manner[1].
E235 (0.1-10 μM; 4 d or 5 d) has anti-proliferative activity on HT1080, RPMI-8226, B16F10, 4T1, HT1080 shNT and HT1080 shATF4 cells[1].
E235 (0, 1, 5 and 10 μM; 4 h) increases the expression of p53 with dose-dependent manner in AG1522 cells[1].
E235 (1 μM; 2 h) increases the expression of p-Chk2 in AG1522 cells[1].

E235 (0, 1, 5 and 10 μM; 2 h) increases the expression of p-p53 in AG1522 and HT1080 cells[1].
E235 (0, 0.5, 1, 5 and 10 μM; 0.5 h) increases the expression of γ-H2AX with dose-dependent manner in HT1080 cells[1].
MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Western Blot Analysis[1]

Cell Line:	HT1080, B16F10 and AG1522 cells.
Concentration:	0, 1, 5 and 10 μM.
Incubation Time:	4 h.
Result:	Increased the expression of ATF4 with dose-dependent manner.

Western Blot Analysis[1]

Cell Line:	HT1080 cells.
Concentration:	0, 0.5, 1, 5 or 10 μM.
Incubation Time:	2, 4 or 8 h.
Result:	Increased the expression of p-eIF2α with time and dose dependent manner.

Cell Proliferation Assay[1]

Cell Line:	HT1080 or RPMI-8226 cells.
Concentration:	1 μM.
Incubation Time:	0, 8, 16 and 24 h.
Result:	Exhibited anti-proliferative activity.

Cell Viability Assay[1]

Cell Line:	AG1522 cells.
Concentration:	0, 0.1, 0.5, 1 and 10 μM.
Incubation Time:	4 d.
Result:	Inhibited cell viability with dose-dependent manner.

Cell Cycle Analysis[1]

Cell Line:	HT1080 cells and B16F10 cells.
Concentration:	1 μM.
Incubation Time:	8, 16 and 24 h.
Result:	Caused cell arrest during G2/M phase.

REFERENCES

[1]. Sayers CM, et al. Identification and characterization of a potent activator of p53-independent cellular senescence via a small-molecule screen for modifiers of the integrated stress response. Mol Pharmacol. 2013 Mar;83(3):594-604.

Caution: Product has not been fully validated for medical applications. For research use only.

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