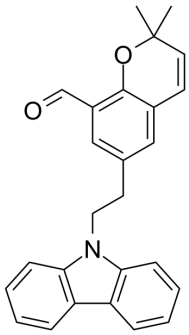
BJE6-106

Cat. No.:	HY-117800
CAS No.:	1564249-38-2
Molecular Formula:	$C_{26}H_{23}NO_2$
Molecular Weight:	381.47
Target:	PKC; Apoptosis
Pathway:	Epigenetics; TGF-beta/Smad; Apoptosis
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 : 50 mg/mL (131.07 mM; Need ultrasonic)

Preparing Stock Solutions	Solvent / Mass / Concentration	1 mg	5 mg	10 mg
	1 mM	2.6214 mL	13.1072 mL	26.2144 mL
	5 mM	0.5243 mL	2.6214 mL	5.2429 mL
	10 mM	0.2621 mL	1.3107 mL	2.6214 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: 2.5 mg/mL (6.55 mM); Suspended solution; Need ultrasonic
2. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (6.55 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

BJE6-106 (B106) is a potent, selective 3rd generation PKCδ inhibitor with an IC_{50} of 0.05 μM and targets selectivity over classical PKC isozyme PKCα (IC_{50}=50 μM). BJE6-106 (B106) induces caspase-dependent apoptosis. BJE6-106 (B106) possesses tumor-specific effect.

IC_{50} & Target

PKCδ	PKCα
0.05 μM (IC_{50})	50 μM (IC_{50})

In Vitro

BJE6-106 (B106) (0.2 μM, 0.5 μM; 24-72 hours) suppresses cell survival in melanoma cell lines with NRAS mutations[1].
BJE6-106 (B106) (0.2 μM, 0.5 μM; 6-24 hours) triggers caspase-dependent apoptosis, increases the activity of caspase 3/7, the effect of B106 is greater than rottlerin (10-fold) in SBcl2 cells[1].

BJE6-106 (B106) (0.5 μM; 2-10 hours) activates the MKK4-JNK-H2AX Pathway by inducing MKK4, JNK and H2AX activation at different times in SBcl2 cells[1].

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

Cell Viability Assay[1]

Cell Line:	Melanoma cell lines with NRAS mutations: SBcl2, FM6, SKMEL2, WM1366, WM1361A, and WM852 cells
Concentration:	0.2 μM, 0.5 μM
Incubation Time:	24 hours, 48 hours, or 72 hours
Result:	Inhibited cell survival in melanoma cell lines.

Apoptosis Analysis[1]

Cell Line:	SBcl2 cells
Concentration:	0.2 μM, 0.5 μM
Incubation Time:	6 hours, 12 hours, or 24 hours
Result:	Induced caspase 3/7 activation.

Western Blot Analysis[1]

Cell Line:	SBcl2 cells
Concentration:	0.2 μM, 0.5 μM
Incubation Time:	2 hours, 5 hours, 10 hours
Result:	Increased phosphorylation of MKK4, JNK and H2AX.

REFERENCES

[1]. Takashima A,et al. Protein kinase Cδ is a therapeutic target in malignant melanoma with NRAS mutation. ACS Chem Biol. 2014 Apr 18;9(4):1003-14.

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

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