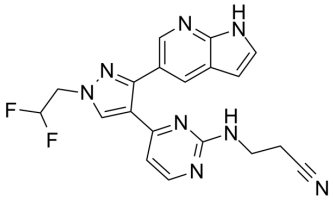
PF-04880594

Cat. No.:	HY-13810
CAS No.:	1111636-35-1
Molecular Formula:	$C_{19}H_{16}F_2N_8$
Molecular Weight:	394.38
Target:	Raf
Pathway:	MAPK/ERK Pathway
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	PF-04880594 is a potent and selective RAF inhibitor. PF-04880594 inhibits both wild-type and mutant BRAF and CRAF. PF-04880594 shows antitumor activity[1].

IC_{50} & Target	Braf	CRAF

In Vitro

PF-04880594 (100 nM; 48 h) causes ERK activation and stimulation of IL-8 release, both of which are blocked by PD-0325901 (HY-10254) treatment[1].

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

Western Blot Analysis[1]

Cell Line:	HL-60
Concentration:	100 nM alone or in combination with 100 nM PD-0325901
Incubation Time:	48 h
Result:	Induced ERK phosphorylation and induced IL-8 production. PD-0325901 treatment blocked the induction.

In Vivo

PF-04880594 (10 mg/kg) induces ERK phosphorylation and BRAF-CRAF dimerization in multiple epithelial tissues in mice and the induction can be attenuated by PD0325901[1].

PF-04880594 (0-40 mg/kg, twice daily for 3 weeks) induces epithelial hyperplasia in mice and the induction is prevented by PD0325901[1].

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

Animal Model:	Nude mice[1]
Dosage:	10 mg/kg alone or in combination with 0.5 mg/kg PD-0325901
Administration:	An am and pm dose on day 1 and then an am dose on day 2 approximately 2 hours before the animals were necropsied and the tissues harvested
Result:	Induced ERK phosphorylation in urinary bladder, tongue, skin, and esophagus tissues.The

	induction of ERK phosphorylation was attenuated by cotreatment with 0.5 mg/kg PD0325901.
Animal Model:	Nude mice (6–8 weeks old)[1]
Dosage:	10, 20 and 40 mg/kg alone or in combination with 0.1, 0.3, 0.5, 1.0, or 2.5 mg/kg PD-0325901
Administration:	Twice daily for 3 weeks
Result:	Tissues treated with the RAF inhibitor alone display the microscopic pathology typical of unopposed BRAF inhibition. Hyperplasia in nonglandular stomach epithelium was blocked by PD-0325901.

REFERENCES

[1]. Torti VR, et al. Epithelial tissue hyperplasia induced by the RAF inhibitor PF-04880594 is attenuated by a clinically well-tolerated dose of the MEK inhibitor PD-0325901. Mol Cancer Ther. 2012 Oct;11(10):2274-83.

Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com
Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA