EGFR-IN-70

Cat. No.: HY-150611

CAS No.: 2926716-96-1

Molecular Formula: $C_{31}H_{36}ClN_5O_5S$

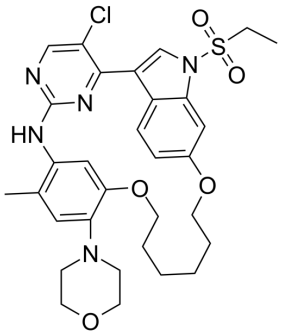
Molecular Weight: 626.17

Target: EGFR

Pathway: JAK/STAT Signaling; Protein Tyrosine Kinase/RTK

Storage:

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



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (159.70 mM; Need ultrasonic)

Preparing Stock Solutions	Mass / Solvent / Concentration	1 mg	5 mg	10 mg
	1 mM	1.5970 mL	7.9851 mL	15.9701 mL
	5 mM	0.3194 mL	1.5970 mL	3.1940 mL
	10 mM	0.1597 mL	0.7985 mL	1.5970 mL

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

BIOLOGICAL ACTIVITY

Description

EGFR-IN-70 (compound 18j) is a potent EGFR inhibitor with IC_{50} values of 23.6 and 307.5 nM for $EGFR^{LR/TM/CS}$ and $EGFR^{WT}$, respectively. EGFR-IN-70 has anti-proliferative activity and suppresses phosphorylation of the EGFR. EGFR-IN-70 can be used for cancer research[1].

IC_{50} & Target

IC_{50}: 23.6 nM ($EGFR^{LR/TM/CS}$) and 307.5 nM $EGFR^{WT}$)[1]

In Vitro

EGFR-IN-70 (compound 18j) (72 hours) has anti-proliferative activity and suppresses the proliferation of Ba/F3-$EGFR^{19del/TM/CS}$, PC-9-OR-$EGFR^{19del/TM/CS}$ and A431- $EGFR^{WT}$ cells with IC_{50} values of 0.052, 0.644 and 2.003 μM, respectively[1].

EGFR-IN-70 (compound 18j) (0-1000 nM; 2 hours; Ba/F3-$EGFR^{19del/TM/CS}$ and PC-9-OR-$EGFR^{19del/TM/CS}$ cells) can suppresse phosphorylation of the EGFR[1].

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

Western Blot Analysis[1]

Cell Line:	Ba/F3-$EGFR^{19del/TM/CS}$ and PC-9-OR-$EGFR^{19del/TM/CS}$ cells
Concentration:	1, 3, 10, 30, 100, 300 and 1000 nM

Incubation Time:	2 hours
Result:	Suppressed phosphorylation of the EGFR and the downstream signaling ERK level.

REFERENCES

[1]. Chen H, et, al. Conformational Constrained 4-(1-Sulfonyl-3-indol)yl-2-phenylaminopyrimidine Derivatives as New Fourth-Generation Epidermal Growth Factor Receptor Inhibitors Targeting T790M/C797S Mutations. J Med Chem. 2022 May 12;65(9):6840-6858.

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