

**PLX4720**

**SYN-1069**

N-(3-(5-chloro-1H-pyrrolo[2,3-b]pyridine-3-carbonyl)-2,4-difluorophenyl)propane-1-sulfonamide

CAS Registry No.: 918505-84-7

Smiles String:

CCCS(=O)(=O)Nc1ccc(c(c1F)C(=O)c2c[nH]c3c2cc(cn3)Cl)F

Molecular Weight: 413.83

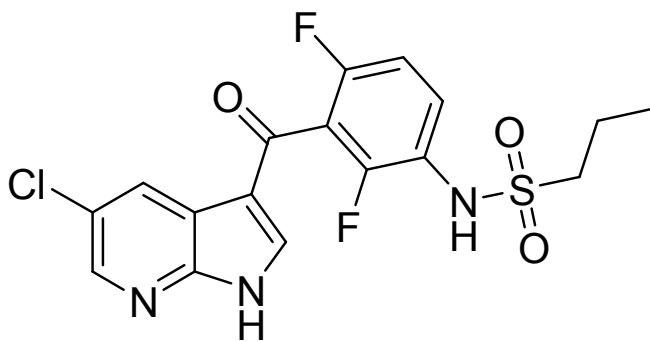
Molecular Formula: C<sub>17</sub>H<sub>14</sub>ClF<sub>2</sub>N<sub>3</sub>O<sub>3</sub>S

Lot Number: Refer to vial

<sup>1</sup>H-NMR: Available on request

HPLC (Purity): > 95.0% @ 254 nm

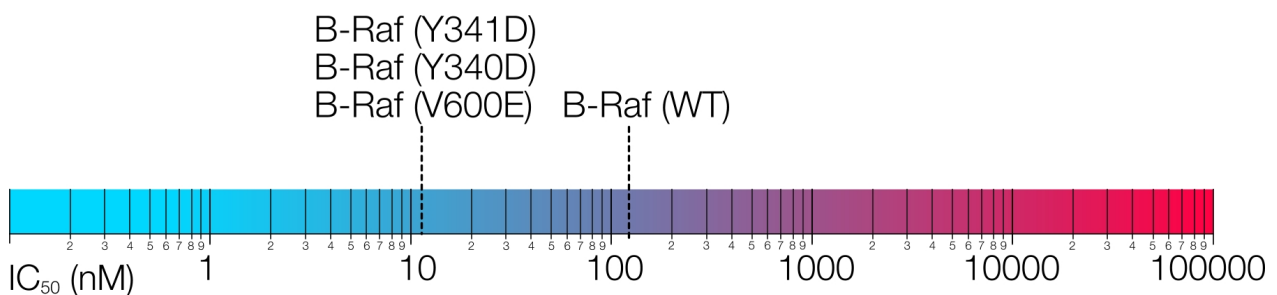
ES-MS: Available on request



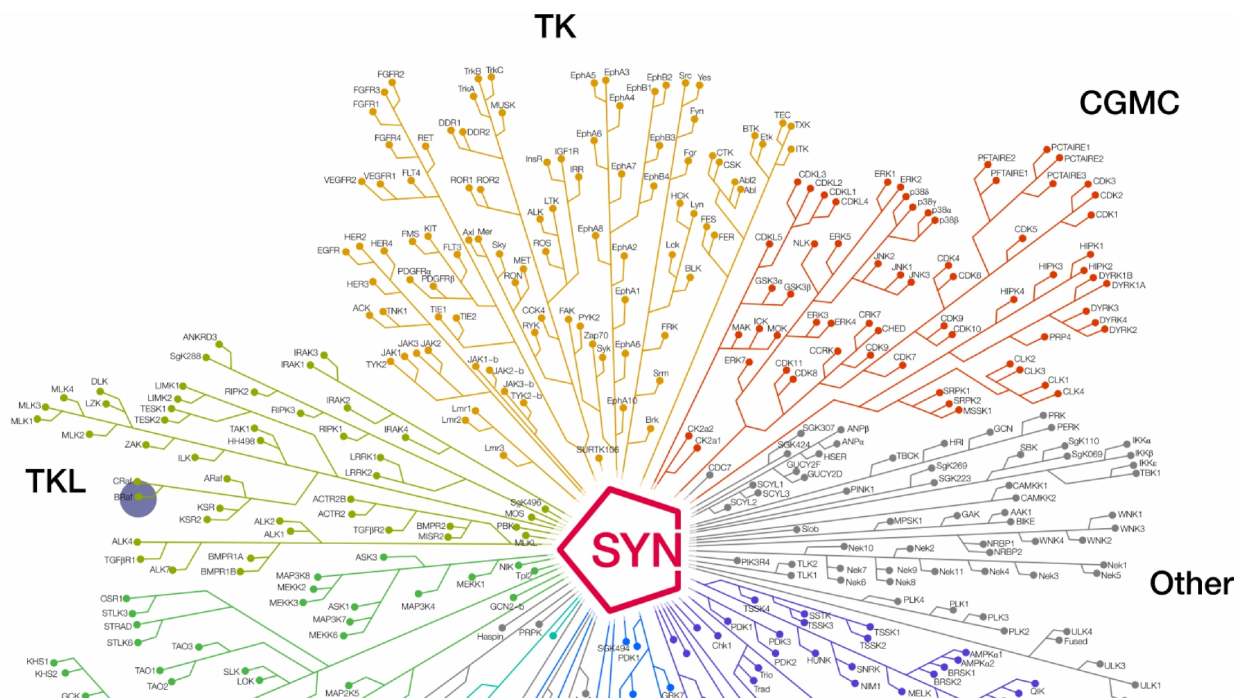
## Description:

PLX4720 is a potent and selective inhibitor of B-Raf V600E with an IC<sub>50</sub> of 13 nM. It is equally potent to c-Raf-1(Y340D and Y341D mutations), and shows 10-fold selectivity for B-Raf V600E over wild-type B-Raf.

## Biological Activity



# Kinome Mapping



## Shipping and Storage Temperature

**Shipping:**  
Ambient

**Storage:**  
2 years -20C, Powder 1 month, -4C in DMSO, More than one month -80C in DMSO

## Solubility

DMSO 83mg/mL, Ethanol 1mg/mL

## Preparing Stock Solutions

Stock Solution (1ml DMSO)	1mM	10mM	20mM	50mM
Mass(mg)	0.4138	4.1383	8.2766	20.6915

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## References

1. Tsai J, Lee JT, Wang W, Zhang J, Cho H, Mamo S, Bremer R, Gillette S, Kong J, Haass NK, Sproesser K, Li L, Smalley KS, Fong D, Zhu YL, Marimuthu A, Nguyen H, Lam B, Liu J, Cheung I, Rice J, Suzuki Y, Luu C, Settachatgul C, Shellooe R, Cantwell J, Kim SH, Schlessinger J, Zhang KY, West BL, Powell B, Habets G, Zhang C, Ibrahim PN, Hirth P, Artis DR, Herlyn M, Bollag G. Discovery of a selective inhibitor of oncogenic B-Raf kinase with potent antimelanoma activity. *Proc Natl Acad Sci U S A*. 2008 Feb 26;105(8):3041-6. doi: 10.1073/pnas.0711741105. Epub 2008 Feb 19.
2. Nucera C, Nehs MA, Nagarkatti SS, Sadow PM, Mekel M, Fischer AH, Lin PS, Bollag GE, Lawler J, Hodin RA, Parangi S. Targeting BRAFV600E with PLX4720 displays potent antimigratory and anti-invasive activity in preclinical models of human thyroid cancer. *Oncologist*. 2011;16(3):296-309. doi: 10.1634/theoncologist.2010-0317. Epub 2011 Feb 25.
3. Nucera C, Porrello A, Antonello ZA, Mekel M, Nehs MA, Giordano TJ, Gerald D, Benjamin LE, Priolo C, Puxeddu E, Finn S, Jarzab B, Hodin RA, Pontecorvi A, Nose V, Lawler J, Parangi S. B-Raf(V600E) and thrombospondin-1 promote thyroid cancer progression. *Proc Natl Acad Sci U S A*. 2010 Jun 8;107(23):10649-54. doi: 10.1073/pnas.1004934107. Epub 2010 May 24.

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## Ordering Information

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Product Datasheet (Rev. 1.1)