Cat No. 34-S51

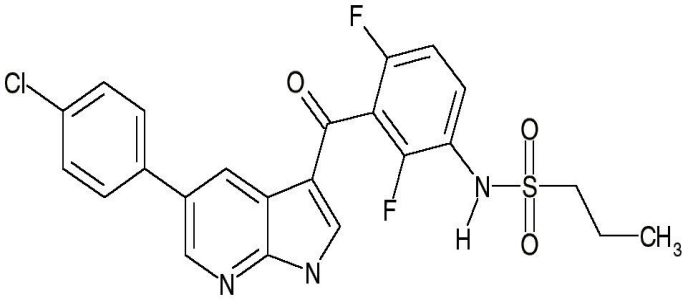
PLX-4032

5 mg

For research purposes only

PLX-4032 is a highly selective inhibitor of BRAF kinase activity with an IC_{50} of 44 nmol/L against V600E-mutant BRAF. BRAFV600E cancer-causing mutation occurs in most melanomas and about eight percent of all solid tumors. PLX-4032 has been shown to selectively inhibit the RAF/MEK/ERK pathway in BRAF mutant cells and induce regression of BRAF mutant xenographs. PLX4032 has also been shown to cause programmed cell death in melanoma cell lines and may be a potential anti-tumor agent.

TECHNICAL INFORMATION



Other Names: Vemurafenib, PLX4032**,** R7204**,** RG7204**,** RO5185426

Chemical Formula: $C_{23}H_{18}ClF_2N_3O_3S$

CAS Number: 918504-65-1

Molecular Weight: 489.92

Purity: >98%

Appearance: a crystalline solid

Solubility: DMSO

STORAGE AND HANDLING

Storage: Store at 4°C and protected from light. Following reconstitution, store aliquots at -20°C.

Stability: Stock solutions stable at -20°C for up to 2 years.

Shipping Conditions: Shipped at room temperature.

PRODUCT USE

Soluble in DMSO at 100 mg/ml. If precipitate is observed, vortex for 5 minutes. For most cells, the maximum tolerance to DMSO is less than 0.5%.

REFERENCES

1. Bollag et al. (2010) Clinical efficacy of a RAF inhibitor needs broad target blockade in BRAF-mutant melanoma. Nature. 267(7315):596-9.
2. Smalley K. (2010) PLX-4032, a small-molecule B-Raf inhibitor for the potential treatment of malignant melanoma. Curr Opin Investig Drugs. 11(6):699-706.
3. Flaherty et al. (2010) Inhibition of mutated, activated BRAF in metastatic melanoma. N Engl J Med. 363 (9):809-19.