

Data Sheet

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Target

Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 RMC-6291

 Cat. No.
 :
 PC-20608

 CAS No.
 :
 2641998-63-0

 Molecular Formula
 :
 C₅₅H₇₈FN₉O₈

 Molecular Weight
 :
 1012.28

Solubility : 10 mM in DMSO

Biological Activity

Elironrasib (RMC-6291) is a potent, covalent, next-generation, mutant-selective inhibitor of active state **KRAS G12C(ON)** with IC50 of 0.7 nM (pERK), RMC-6291 forms a tri-complex within tumor cells between KRASG12C(ON) and cyclophilin A (CypA).

RMC-6291 potently inhibits HCI-H358 cell growth (KRAS G12C) with IC50 of 0.09 nM, >10000-fold selectivity over WT cell. RMC-6291 overcomes the limitations of first-generation KRASG12C(OFF) inhibitors in preclinical models by directly targeting the active form of KRAS G12C.

Oral administration of RMC-6291 produces deep and durable suppression of RAS pathway activity in KRASG12C tumor models and drives profound tumor regressions in vivo at well-tolerated doses.

RMC-6291 outperforms MRTX849 (Adagrasib, Cat. PC-72227), a KRASG12C(OFF) inhibitor, in mouse clinical trial consisting of multiple patient- and cell line-derived xenograft models of KRASG12C NSCLC.

Combination treatment with RMC-6291 and SHP2 or SOS1 inhibitors was well tolerated in preclinical models and further increased anti-tumor activity.

RMC-6291 also combined well with immune checkpoint inhibitors, sensitizing KRASG12C-bearing cancer models to antitumor immunity.

References

Robert J. Nichols, et al. *Cancer Res* (2022) 82 (12_Supplement): 3595.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

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