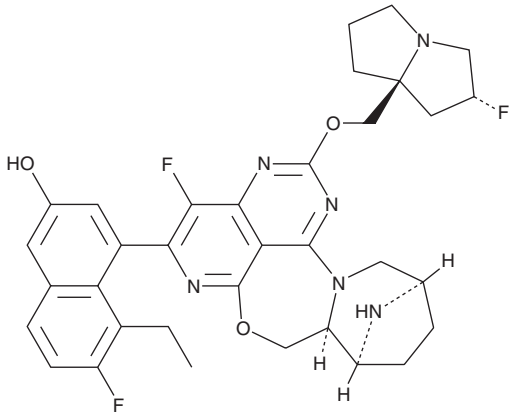
# PRODUCT INFORMATION

## HRS-4642

*Item No. 46294*



| | |
|---|---|
| **CAS Registry No.:** | 2836263-09-1 |
| **Formal Name:** | 5-ethyl-6-fluoro-4-[(8aS,9S,12R)-4-fluoro-2-[[(2R,7aS)-2-fluorotetrahydro-1H-pyrrolizin-7a(5H)-yl]methoxy]-8a,9,10,11,12,13-hexahydro-9,12-imino-8H-7-oxa-1,3,6-13a-tetraazanaphtho[1,8-ab]heptalen-5-yl]-2-naphthalenol |
| **MF:** | $C_{34}H_{35}F_3N_6O_3$ |
| **FW:** | 632.7 |
| **Purity:** | ≥95% |
| **Supplied as:** | A solid |
| **Storage:** | -20°C |
| **Stability:** | ≥4 years |

*Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.*

### Laboratory Procedures

HRS-4642 is supplied as a solid. A stock solution may be made by dissolving the HRS-4642 in the solvent of choice, which should be purged with an inert gas. HRS-4642 is sparingly soluble (1-10 mg/ml) in methanol and slightly soluble (0.1-1 mg/ml) in DMSO.

### Description

HRS-4642 is an inhibitor of K-Ras$^{G12D}$ ($IC_{50}$ = 2.329 nM for total RAS activity in K-Ras$^{G12D}$-expressing AsPC-1 cells).[1] It selectively binds to K-Ras$^{G12D}$ over K-Ras$^{G12C}$ and wild-type K-Ras ($K_d$s = 0.083, 1.76, and 1.38 nM, respectively). HRS-4642 also selectively inhibits the interactions between GDP-loaded K-Ras$^{G12D}$ and son of sevenless homolog 1 (SOS1) and GTP-loaded K-Ras$^{G12D}$ and C-RAF ($IC_{50}$s = 0.72 and 5.9 nM, respectively) over wild-type GDP- or GTP-loaded K-Ras with SOS1 or C-RAF ($IC_{50}$s = 14.98 and 171.8 nM, respectively). Moreover, it selectively inhibits the proliferation of K-Ras$^{G12D}$-expressing cancer cells over other K-Ras mutant- or wild-type K-Ras-expressing cancer cells ($IC_{50}$s = 0.55-66.58 and 248.5->10,000 nM, respectively). HRS-4642 (7.5 and 15 mg/kg) decreases tumor volume in multiple mouse xenograft models. It synergizes with carfilzomib (Item No. 17554) to decrease tumor volume and increase intratumoral immune cell infiltration in a KP-1 leukemia mouse xenograft model.

### Reference


1. Zhou, C., Li, C., Luo, L., *et al.* Anti-tumor efficacy of HRS-4642 and its potential combination with proteasome inhibition in KRAS G12D-mutant cancer. *Cancer Cell* **42(7),** 1286-1300 (2024).



**WARNING**
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

**SAFETY DATA**
This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the complete Safety Data Sheet, which has been sent *via* email to your institution.

**WARRANTY AND LIMITATION OF REMEDY**
Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

Copyright Cayman Chemical Company, 10/07/2026



**CAYMAN CHEMICAL**
1180 EAST ELLSWORTH RD
ANN ARBOR, MI 48108 · USA
**PHONE:** [800] 364-9897
[734] 971-3335
**FAX:** [734] 971-3640
CUSTSERV@CAYMANCHEM.COM
WWW.**CAYMANCHEM**.COM