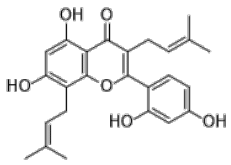
ProbeChem®
*Expedite Your Scientific Research*

WWW.PROBECHEM.COM

# Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

| | | |
|---|---|---|
| **Product Name** | : | Kuwanon C |
| **Cat. No.** | : | PC-25519 |
| **CAS No.** | : | 62949-79-5 |
| **Molecular Formula** | : | $C_{25}H_{26}O_6$ |
| **Molecular Weight** | : | 422.48 |
| **Target** | : | Sirtuin |
| **Solubility** | : | 10 mM in DMSO |




## Biological Activity

Kuwanon C (KWN-C, Mulberrin) is an effective inhibitor of organic anion-transporting polypeptide 2B1 (OATP2B1)-mediated estrone-3-sulfate (E3S) uptake with IC50 of 1.8 uM, also inhibits SIRT1 activity via targeting activity of the TGF-β1-Smad2/3-JNK1 signaling pathway.
KWN-C suppressed pSmad2/3–JNK1 levels, which subsequently abrogated the phosphorylation of SIRT1S27 and SIRT1S47.
KWN-C decreases KRASMut activity via reducing SIRT1 activity and enhancing the acetylation of KRASMut.
KWN-C synergistically decreased KRASMut lung cancer proliferation combined with Cisplatin and Pemetrexed.
KWN-C synergistically reduces tumor burden in lung orthotropic models bearing KRAS G12C combined with Cisplatin and Pemetrexed.

## References

Wen F, et al. Identification of natural products as modulators of OATP2B1 using LC-MS/MS to quantify OATP-mediated uptake. Pharm Biol. 2016;54(2):293-302.

Shin DH, et al. Exp Mol Med. 2025 Sep 12. doi: 10.1038/s12276-025-01536-8.



E-mail: tech@probechem.com