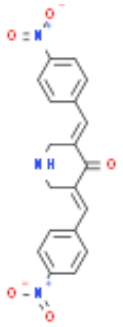
# Product Data Sheet

| | | | |
|---|---|---|---|
| Cas No.: | 919091-63-7 | Cat. No: | PL03607 |
| Product Name: | RA-9 | | |
| Product synonym: | (3E,5E)-3,5-双(4-硝基亚苄基)哌啶-4-酮;化合物RA-9 | | |
| Chemical name: | RA-9 | | |
| MF: | C19H15N3O5 | FW: | 365.339504480362 |
| Purity: | ≥98% | Batch No.: | - |
| Storage: | | | |
| Structural formula: |  | | |
| λmax： | - | Formulation： | - |
| Solubility : | | | |
| SMILES : | C(/C1C=CC([N+](=O)[O-])=CC=1)=C1/CNC/C(=C\C2C=CC([N+](=O)[O-])=CC=2)/C/1=O | | |
| InChI Code: | - | | |
| InChI Key: | | | |
| **WARNING This product is not for human or veterinary use.** | | | |

## Product Description

RA-9 是一种高效选择性蛋白酶体相关 DUBs 抑制剂，具有良好的毒性和抗癌活性。RA-9 阻断泛素依赖性蛋白降解而不影响 20S 蛋白酶体蛋白水解活性。RA-9 选择性诱导卵巢癌细胞株和供体原代培养细胞凋亡。RA-9 诱导卵巢癌细胞内质网应激反应。

| | |
|---|---|
| 生物活性 | RA-9 is a potent and selective proteasome-associated deubiquitinating enzymes (DUBs) inhibitor with favorable toxicity profile and anticancer activity. RA-9 blocks ubiquitin-dependent protein degradation without impacting 20S proteasome proteolytic activity. RA-9 selectively induces onset of apoptosis in ovarian cancer cell lines and primary cultures derived from donors. RA-9 induces endoplasmic reticulum (ER)-stress responses in ovarian cancer cells. |
| 体外研究(In Vitro) | RA-9 (10-30 μM; 48 hours) inhibits growth of ovarian cancer cell lines and primary cultures.<br>RA-9 (1.25-5 μM; 18 hours) causes cell cycle arrest and caspase-mediated apoptosis in ovarian cancer cells.<br>RA-9 (5 μM; 0-24 hours) induces ER-stress responses in ovarian cancer cells.<br>RA-9 (5 μM; over 24 hours) treatment results with time-dependent accumulation of the cleaved formed of PARP noticeable as early as 8 hours. has not independently confirmed the accuracy of these methods. They are for reference only. |

| | |
|---|---|
| 体内研究(In Vivo) | RA-9 (5 mg/kg; i.p; one-day on, two-days off) inhibits human ovarian cancer cell growth in vivo and prolongs survival in a mouse model for ovarian cancer. has not independently confirmed the accuracy of these methods. They are for reference only. Animal Model: |
| 包装储存 | Powder -20°C 3 years； 4°C 2 years |
| 溶解度数据 | In Vitro: DMSO : 4.17 mg/mL (11.41 mM; ultrasonic and warming and heat to 80°C)配制储备液 |