

**Product Name** : ICSN3250 hydrochloride

**Synonyms** : ICSN-3250

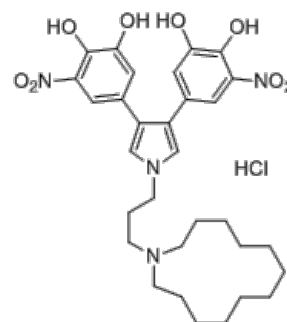
**Cat No.** : M12224

**CAS Number** : 1561902-79-1

**Molecular Formula** : C<sub>31</sub>H<sub>41</sub>ClN<sub>4</sub>O<sub>8</sub>

**Formula Weight** : 633.14

**Chemical Name** : 5,5'-(1-(3-(azacyclotridecan-1-yl)propyl)-1H-pyrrole-3,4-diyl)bis(3-nitrobenzene-1,2-diol) hydrochloride



**Description** : ICSN3250 (ICSN-3250) hydrochloride is a halitulin-analogue that acts as a new-class, specific mTOR inhibitor through a mechanism distinct from previous mTOR inhibitors; ICSN3250 is not a kinase inhibitor of mTOR, competes with and displaces phosphatidic acid from the FRB domain in mTOR, thus preventing mTOR activation and leading to cytotoxicity; displays no inhibitory capacity towards PI3K $\alpha$ ,  $\beta$ ,  $\gamma$ , or  $\delta$ ; inhibits mTORC1 by following an unprecedented mechanism that involved its competition with PA at the FRB domain of mTOR to overcome the TSC negative regulation of mTORC1; ICSN3250 specifically targets cancer cells both in vitro and ex vivo.

**Pathway** : PI3K/Akt/mTOR signaling

**Target** : mTOR

**Receptor** : mTOR

**Solubility** : —

**SMILES** : C1CCCCCN(CCCCC1)CCCN2C=C(C(=C2)C3=CC(=C(C(=C3)O)O)[N+](=O)[O-])C4=CC(=C(C(=C4)O)O)[N+](=O)[O-].Cl

**Storage** : (-20°C)

**Stability** :  $\geq 2$  years

**Reference** :

1. Nguyen TL, et al. Cancer Res. 2018 Jul 27. pii: canres.0232.2018.