

## **Product** Data Sheet

## Recilisib sodium

Cat. No.: HY-101625A

CAS No.: 922139-31-9

Molecular Formula: C<sub>16</sub>H<sub>1,2</sub>ClNaO<sub>4</sub>S

Molecular Weight: 358.77

Target: Akt; PI3K

Pathway: PI3K/Akt/mTOR

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

## **BIOLOGICAL ACTIVITY**

**Description** Recilisib sodium (ON 01210) is a radioprotectant, which can activate AKT, PI3K activities in cells<sup>[1]</sup>.

In Vitro Recilisib

Recilisib sodium (up to  $50~\mu\text{M}$ ) shows a normal distribution of cells throughout the cell cycle, with a slight reduction in the number of cells in S-phase at  $50~\mu\text{M}$ . Continuous exposure of Recilisib sodium ( $100~\mu\text{M}$ ) does not result in cell death. Recilisib sodium treatment does not inhibit the colony forming potential of human bone marrow cells. Recilisib sodium provides dose dependent protection of human bone marrow cells at all three doses of IR. Recilisib sodium activates the phosphorylation of AKT and GSK3 $\alpha/\beta$  in HFL cells. Recilisib sodium increases PI3K activity in HFL-1 cells and murine bone marrow cells in response to radiation exposure. Recilisib sodium treatment in combination with radiation alters the MAPK signaling pathway<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

In Vivo

Recilisib sodium (500 mg/kg) significantly increases the rate of recovery and differentiation of primitive bone marrow myeloid progenitor cells in mice. Recilisib sodium in combination with radiation reduces CFU numbers in mice, but the Recilisib sodium-treated mice consistently retain a capability to form differentiated colonies. Recilisib sodium treated mice have a progenitor cell population that is never completely depleted by radiation exposure<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

## **CUSTOMER VALIDATION**

- J Pharm Anal. 2023 Mar 24.
- Int J Biol Macromol. 2020 Mar 15;147:79-88.
- Phytomedicine. 2023 Jan 31;112:154684.
- Phytomedicine. 6 July 2022, 154323.
- Int Immunopharmacol. 2023 Jan 10;115:109677.

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**REFERENCES** 

1]. Kang AD, et al. ON01210.Na (E	Ex-RAD) mitigates radiation damage through activation of the AKT pathway. PLoS One. 2013;8(3):e58355.	
	Caution: Product has not been fully validated for medical applications. For research use only.	
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