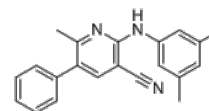


**Product Name** : MSU38225  
**Cat. No.** : PC-38190  
**CAS No.** : 1629160-83-3  
**Molecular Formula** : C<sub>21</sub>H<sub>19</sub>N<sub>3</sub>  
**Molecular Weight** : 313.404  
**Target** : Keap1-Nrf2  
**Solubility** : 10 mM in DMSO (3.1 mg/mL)



## Biological Activity

MSU38225 (MSU-38225) is a novel small molecule that inhibits the **Nrf2** pathway, potentially inhibiting Nrf2 transcriptional activity and cancer cell growth.

MSU38225 downregulates Nrf2 transcriptional activity and decreases the expression of Nrf2 downstream targets, including NQO1, GCLC, GCLM, AKR1C2, and UGT1A6.

MSU38225 strikingly decreases the protein level of Nrf2, which can be blocked by the proteasome inhibitor MG132.

Ubiquitination of Nrf2 is enhanced following treatment with MSU38225.

By inhibiting production of antioxidants, MSU38225 increases the level of reactive oxygen species (ROS) when cells are stimulated with tert-butyl hydroperoxide (tBHP).

MSU38225 also inhibits the growth of human lung cancer cells in both two-dimensional cell culture and soft agar.

## References

Di Zhang, et al. *Mol Cancer Ther.* 2021 Sep;20(9):1692-1701.

**Caution: Product has not been fully validated for medical applications. Lab Use Only!**

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