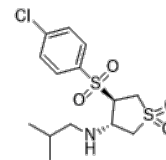


**Product Name** : CBR-470-1  
**Cat. No.** : PC-24727  
**CAS No.** : 2416095-06-0  
**Molecular Formula** : C<sub>14</sub>H<sub>20</sub>ClNO<sub>4</sub>S<sub>2</sub>  
**Molecular Weight** : 365.89  
**Target** : Keap1-Nrf2  
**Solubility** : 10 mM in DMSO



### Biological Activity

CBR-470-1 is a small molecule inhibitor of glycolytic enzyme phosphoglycerate kinase 1 (PGK1), activates NRF2 signaling in vitro and in vivo.

CBR-470-1 induces transcript levels of NQO1 and HMOX1, as well as enhances NRF2 protein stabilization in HEK293T, SH-SY5Y, and primary human lung fibroblasts.

CBR-470-1 induces methylglyoxal modification of Keap1, Keap1-Nrf2 disassociation, and increases expression of Nrf2 responsive genes.

CBR-470-1 potently attenuates MPP<sup>+</sup>-induced oxidative injury and SH-SY5Y cell apoptosis.

CBR-470-1 neuroprotection is dependent upon Nrf2, as Nrf2 shRNA or CRISPR/Cas9-mediated Nrf2 knockout, abolished CBR-470-1-induced SH-SY5Y cytoprotection against MPP<sup>+</sup>.

### References

Bollong MJ, et, al. Nature. 2018 Oct;562(7728):600-604.

Zheng J, et al. Aging (Albany NY). 2020 Jul 10;12(13):13388-13399.

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

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