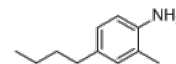


**Product Name** : SMIP004-7  
**Cat. No.** : PC-72545  
**CAS No.** : 72072-16-3  
**Molecular Formula** : C<sub>11</sub>H<sub>17</sub>N  
**Molecular Weight** : 163.264  
**Target** : Other Targets  
**Solubility** : 10 mM in DMSO



### Biological Activity

SMIP004-7 is a small molecule inhibitor of **mitochondrial respiration** with selective in vivo anti-cancer activity, targets drug-resistant cancer cells with stem-like features by inhibiting NADH:ubiquinone oxidoreductase (**complex I**). SMIP004-7 suppressed colony formation against various prostate (LNCaP, 22RV1, LAPC4), colon cancer (HCT116), and mouse triple-negative breast cancer (4T1) cell lines. SMIP004-7 inhibits NADH oxidation activity and tumor hypoxia in vivo, promotes cancer immune surveillance. SMIP004-7 stabilizes NDUFS2 in cells, NDUFS2 appears to play a unique role in the mechanism of SMIP004-7.

### References

Shashi Jain, et al. *Cell Chem Biol.* 2021 Nov 23;S2451-9456(21)00479-7.

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

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