

# PRODUCT INFORMATION



## HP661

Item No. 38927

CAS Registry No.: 2938220-60-9

Formal Name: 5-[[5-methyl-4-[[4-[(2,2,2-trifluoroethoxy)phenyl]methyl]-1-piperazinyl]carbonyl]-1H-1,2,3-triazol-1-yl]methyl]-N-[4-(trifluoromethyl)phenyl]-2-pyridinecarboxamide

MF: C<sub>31</sub>H<sub>29</sub>F<sub>6</sub>N<sub>7</sub>O<sub>3</sub>

FW: 661.6

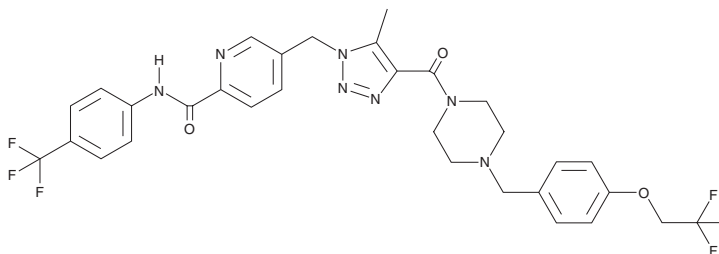
Purity: ≥98%

UV/Vis.: λ<sub>max</sub>: 225, 281 nm

Supplied as: A crystalline solid

Storage: -20°C

Stability: ≥4 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

### Laboratory Procedures

HP661 is supplied as a crystalline solid. A stock solution may be made by dissolving the HP661 in the solvent of choice, which should be purged with an inert gas. HP661 is soluble in methanol and chloroform.

### Description

HP661 is an inhibitor of mitochondrial complex I, also known as NADH dehydrogenase.<sup>1</sup> It is selective for complex I, inhibiting it by 77.6%, over complex III, which it inhibits by 28.1%, and complexes II and IV, which it does not inhibit, at 1 μM. HP661 selectively reduces viability of the human lung cancer cells H460, NCI H441, and trametinib-resistant A549 cells (IC<sub>50</sub>s = 10.6, 29.7, and 15.1 nM, respectively), which all have high levels of oxidative phosphorylation, over NCI H358 human lung cancer cells (IC<sub>50</sub> = >10,000 nM), which have low levels of oxidative phosphorylation, and non-cancerous human pancreatic normal epithelial (HPNE) and MRC-5 human fetal lung fibroblast cells (IC<sub>50</sub>s = >10,000 nM for both). HP661 reduces tumor volume in an H460 mouse xenograft model when administered at a dose of 30 mg/kg twice per day and has an additive effect on trametinib-induced reduction of tumor growth.

### Reference

1. He, P., Feng, J., Xia, X., *et al.* Discovery of a potent and oral available complex I OXPHOS inhibitor that abrogates tumor growth and circumvents MEKi resistance. *J. Med. Chem.* **66**(9), 6047-6069 (2023).

#### WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

#### SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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