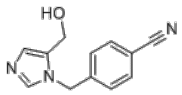
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Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

Product Name	:	Dual CYP19A1/CYP11B2 inhibitor X21
Cat. No.	:	PC-21449
CAS No.	:	183500-36-9
Molecular Formula	:	$C_{12}H_{11}N_3O$
Molecular Weight	:	213.24
Target	:	Cytochrome P450 (CYPs)
Solubility	:	10 mM in DMSO



CAS: 183500-36-9

Biological Activity

Dual CYP19A1/CYP11B2 inhibitor X21 is a potent and selective dual inhibitor of aromatase (**CYP19A1**) and aldosterone synthase (**CYP11B2**) with IC50 of 2.3 nM and 29 nM, respectively.
X21 shows high selectivity with respect to 11β-hydroxylase (CYP11B1), as well as CYP3A4 and CYP1A2.
X21 shows potent antiproliferative activity against BC cell lines, particularly against the ER+ MCF-7 cells (IC50 of 0.26 μM at 72 h), and a remarkable pro-apoptotic effect.
X21 significantly inhibits mTOR phosphorylation, thereby negatively modulating the PI3K/Akt/mTOR axis.

References

Annachiara Tinivella, et al. ***ACS Pharmacology & Translational Science***. 2023.

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

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