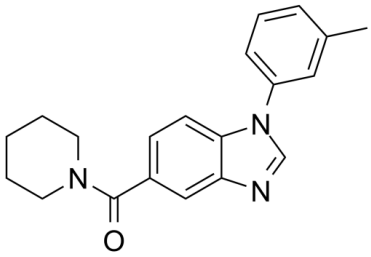
Data Sheet

Product Name:	ML148
Cat. No.:	CS-0082978
CAS No.:	451496-96-1
Molecular Formula:	$C_{20}H_{21}N_3O$
Molecular Weight:	319.40
Target:	15-PGDH
Pathway:	Metabolic Enzyme/Protease
Solubility:	DMSO : 50 mg/mL (156.54 mM; ultrasonic and warming and heat to 80°C)



BIOLOGICAL ACTIVITY:

ML148 is a potent and selective **15-PGDH** inhibitor with an **IC_{50}** of 56 nM. ML148 has the potential for the research of prostaglandin-signaling pathways[1]. IC50 & Target: IC_{50}: 56 nM (15-PGDH)[1] **In Vitro:** ML148 (compound 13) shows selectivity with IC_{50}s of 56, 36000, >57500, >57500 nM for 15-PGDH, ALDH1A1, HADH2, HSD17β4, respectively[1].
ML148 (10, 20 nM) decrease V_{max} by 25% and reduces the apparent K_m by half at a concentration of 10 nM[1].

References:

[1]. Niesen FH, et al. High-affinity inhibitors of human NAD-dependent 15-hydroxyprostaglandin dehydrogenase: mechanisms of inhibition and structure-activity relationships. PLoS One. 2010 Nov 2;5(11):e13719.

CAIndexNames:

Methanone, [1-(3-methylphenyl)-1H-benzimidazol-5-yl]-1-piperidinyl-

SMILES:

O=C(N1CCCCC1)C2=CC=C3N(C=NC3=C2)C4=CC=CC(C)=C4

Caution: Product has not been fully validated for medical applications. For research use only.

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