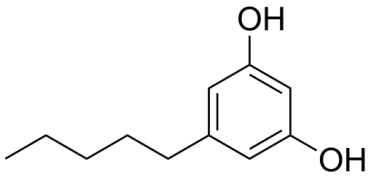
Data Sheet

Product Name:	Olivetol
Cat. No.:	CS-W008364
CAS No.:	500-66-3
Molecular Formula:	$C_{11}H_{16}O_2$
Molecular Weight:	180.24
Target:	Cannabinoid Receptor; Cytochrome P450
Pathway:	GPCR/G Protein; Metabolic Enzyme/Protease; Neuronal Signaling
Solubility:	DMSO : 100 mg/mL (554.82 mM; Need ultrasonic)



BIOLOGICAL ACTIVITY:

Olivetol is a naturally phenol found in lichens and produced by certain insects, acting as a competitive inhibitor of the cannabinoid receptors **CB1** and **CB2**[3]. Olivetol also inhibits **CYP2C19** and **CYP2D6** activity, with IC_{50}s of 15.3 μM, 7.21 μM and K_is of 2.71 μM, 2.87 μM, respectively[1][2]. IC50 & Target:IC50: 7.21 μM (CYP2D6)[2], 15.3 μM (CYP2C19)[1]
Ki: 2.71 μM (CYP2C19)[1], 2.87 μM (CYP2D6)[2]
CB1, CB2[3]
In Vitro: Olivetol inhibits the (S)-mephenytoin 4'-hydroxylase activity of CYP2C19 activity with an IC_{50} of 15.3 μM and a K_i of 2.71 μM [1]. Olivetol also inhibits AMMC O-demethylase activity of recombinant CYP2D6 with an IC_{50} of 7.21 μM and a K_i of 2.87 μM[2]. Olivetol is a competitive inhibitor of the cannabinoid receptors CB1 and CB2[3].

References:

[1]. Jiang R, et al. Cannabidiol is a potent inhibitor of the catalytic activity of cytochrome P450 2C19. Drug Metab Pharmacokinet. 2013;28(4):332-8.

[2]. Yamaori S, et al. Cannabidiol, a major phytocannabinoid, as a potent atypical inhibitor for CYP2D6. Drug Metab Dispos. 2011 Nov;39(11):2049-56.

[3]. James J. Carberry , et al. Composition of Olivetol and Method of Use to Reduce or Inhibit the Effects of Tetrahydrocannabinol in the Human Body. US20170143644A1

CAIndexNames:

1,3-Benzenediol, 5-pentyl-

SMILES:

OC1=CC(CCCCC)=CC(O)=C1

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