

URB-597

Catalog No: tcsc0266



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

546141-08-6

Formula:

$C_{20}H_{22}N_2O_3$

Pathway:

Neuronal Signaling;Metabolic Enzyme/Protease;Autophagy;Autophagy

Target:

FAAH;FAAH;Autophagy;Mitophagy

Purity / Grade:

>98%

Solubility:

H2O :

Alternative Names:

KDS-4103

Observed Molecular Weight:

338.4

Product Description

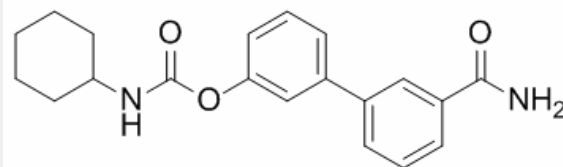
URB597 is a potent, orally bioavailable FAAH inhibitor with IC₅₀ of 4.6 nM, with no activity on other cannabinoid-related targets.

IC₅₀ value: 4.6 nM [1]

Target: FAAH

in vitro: URB597 binds in the hydrophobic pocket and catalytic core of FAAH that connects the active site residues to the membrane surface of FAAH [1]. URB597 reduces the expression of the LPS-induced enzymes cyclo-oxygenase 2 (COX-2) and inducible nitric oxide synthase (iNOS; NOS2) in primary rat microglial cell, with a concomitant reduction in the release of the inflammatory mediators prostaglandin E2 (PGE2) and (NO) nitric oxide [2].

in vivo: URB597 inhibits [3H]anandamide hydrolysis in rat brain membranes with a parallel increase in brain anandamide, OEA, and PEA content by inhibition of FAAH. URB597 enhances the hypothermia effect induced by ethanolamide by inhibiting FAAH [3]. When delivered intraperitoneally (0.3 mg/kg) URB597 reduces allodynia and hyperalgesia through cannabinoid CB1 and CB2 receptor-mediated analgesia in rats with inflammatory pain [4].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!