

# 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

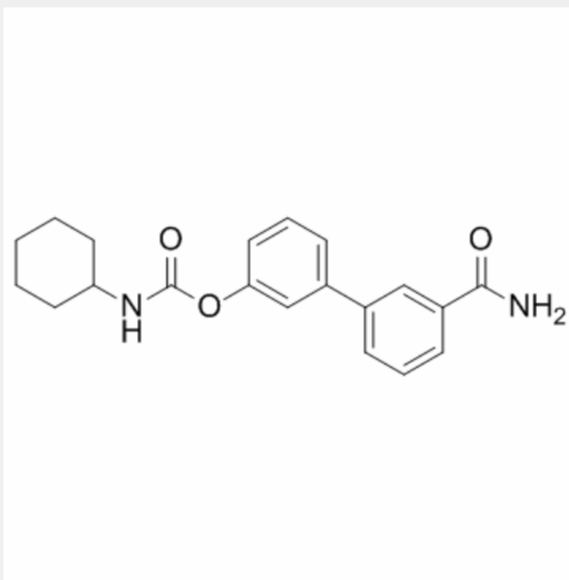
URB597 is a potent, orally bioavailable FAAH inhibitor with IC50 of 4.6 nM, with no activity on other cannabinoid-related targets.

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 [<sup>3</sup>H]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!