**Product Name:** URB-597  
**CAS No.:** 546141-08-6  
**Cat. No.:** HY-10864  
**MWT:** 338.40  
**Formula:** C20H22N2O3  
**Purity :** >98%  

**Solubility:**  
DMSO $\geq$ 64mg/mL  
Water $<$ 1.2mg/mL  
Ethanol $\geq$ 4.6mg/mL  

**Mechanisms:**  
Pathways: Neuronal Signaling; Target: FAAH

**Biological Activity:**

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 int...

**References:**