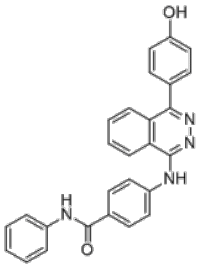
ProbeChem®
*Expedite Your Scientific Research*

WWW.PROBECHEM.COM

# Data Sheet

Global Supplier of Chemical Probes, Inhibitors & Agonists.

| | | |
|---|---|---|
| **Product Name** | : | ARN272 |
| **Cat. No.** | : | PC-38511 |
| **CAS No.** | : | 488793-85-7 |
| **Molecular Formula** | : | $C_{27}H_{20}N_4O_2$ |
| **Molecular Weight** | : | 432.47 |
| **Target** | : | FAAH |
| **Solubility** | : | 10 mM in DMSO |




## Biological Activity

ARN272 (ARN-272) is a specific, competitive FAAH-like anandamide transporter (FLAT) inhibitor, antagonizes [3H]-anandamide binding to purified FLAT (IC50=1.8 uM) and inhibits [3H]-anandamide accumulation in FLAT-expressing HEK293 cells with IC50 of 3 uM.
ARN272 (1 mg/kg intraperitoneal, i.p.) in mice increased plasma levels of anandamide without changing the levels of 2-AG, OEA or PE.
ARN272 produces CB1-dependent antinociception, attenuates nociceptive and inflammatory pain in mice.
ARN272 tonically activates CB1 receptors and as such produces a type of indirect agonism to regulate toxin-induced nausea and vomiting.
FAAH-like anandamide transporter (FLAT) is a partly cytosolic variant of the intracellular anandamide-degrading enzyme, fatty acid amide hydrolase-1 (FAAH-1).
FLAT was proposed to function as an intracellular AEA carrier and mediate its delivery to FAAH for hydrolysis.
Pharmacological inhibition of FLAT potentiated AEA signaling and produced antinociceptive effects.

## References

Fu J, et al. Nat Neurosci. 2011 Nov 20;15(1):64-9.

O'Brien LD, et al. Br J Pharmacol. 2013 Nov;170(5):1130-6.



E-mail: tech@probechem.com