

## **Data Sheet**

WWW.PROBECHEM.COM

Global Supplier of Chemical Probes, Inhibitors & Agonists.

 Product Name
 :
 MK-0354

 Cat. No.
 :
 PC-43317

 CAS No.
 :
 851776-28-8

 Molecular Formula
 :
 C<sub>7</sub>H<sub>8</sub>N<sub>6</sub>

 Molecular Weight
 :
 176.1786

Target : GPR109A (Niacin Receptor 1)

**Solubility** : DMSO: ≥ 36 mg/mL

## **Biological Activity**

MK-0354 is a potent, selective niacin receptor **GPR109A** partial agonist with EC50 of 1.65 and 1.08 uM for hGPR109A and mGPR109A in the whole cell cAMP assays.

MK-0354 shows no interaction with any other target in a panel of over 120 other proteins.

MK-0354 is a competitive inhibitor of 3H-nicotinic acid binding to hGPR109a with Ki of 505 nM, fully inhibits isoproterenol stimulated lipolysis in human adipocytes with IC50 of 3.1 uM.

MK-0354 also is a competitive antagonist of nicotinic acid-induced MAPK signaling in cells overexpressing either mGPR109a or hGPR109a.

MK-0354 possesses plasma FFA lowering effects in mice comparable to those of nicotinic acid, does not induce vasodilation.

## References

Semple G, et al. *J Med Chem*. 2008 Aug 28;51(16):5101-8.

Lai E, et al. *J Clin Lipidol*. 2008 Oct;2(5):375-83.

Walters RW, et al. *J Clin Invest*. 2009 May;119(5):1312-21.

Gaidarov I, et al. *Cell Signal*. 2013 Oct;25(10):2003-16.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com