Product Datasheet

CID 16020046 (orb1221742)

Catalog Number	orb1221742
Category	Small Molecules
Description	CID16020046 is a selective GPR55 inverse agonist. CID16020046 is a G protein-coupled receptor that is weakly activated by some cannabinoids at nM concentrations. CID16020046 has been shown to block GPR55-mediated endothelial wound healing and reverse LPI-inhibited platelet aggregation.(In Vitro):CID 16020046 has weak activities close for inhibition of the acetylcholinesterase (pIC50=4.4), antagonism of the m-opioid receptor (pIC50=4.6), and blockade of KCNH2, the hERG channel (pIC50=4.6) 6 in human embryonic kidney (HEK)-G protein–coupled receptor 55 (GPR55) cells.CID 16020046 (2.5 μM; for ≥25 minutes) significantly inhibits the lysophosphatidylinositol (LPI; 2.5 μM) induced ERK1/2 phosphorylation. CID 16020046 alone fails to induce intracellular Ca2+ release in HEK-GPR55, HEKCB1 cells and shows no ERK1/2 phosphorylation.Pretreatment with CID16020046 (0.01, 0.1, 1, 10 μM) leads to a concentration-dependent decrease in GPR55-mediated NFAT activation, NF-kB activation, and SRE induction in response to 1 μM LPI or GSK319197A in HEKGPR55 and HEK-CB1 cells.CID16020046 (2.5 μM) antagonizes GPR55-mediated activation and nuclear translocation of transcription factors but has no effect on CB1-mediated CREB activation.Pretreatment CID16020046 (1 μM) abolished the LPI-induced stimulation of wound healing in HMVEC-Ls.
Target	GPR55
Purity	>98% (HPLC)
MW	425.44
Target Areas	GPR55
Solubility (25°C)	DMSO : ≥ 28 mg/mL; 65.81 mM
CAS Number	834903-43-4

Biorbyt Ltd.
7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

Biorbyt LLC
68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713-2847
United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558

Formula	$C_{25}H_{19}N_3O_4$
SMILES	CC1=CC=C(C=C1)C2=NNC3=C2C(N(C3=O)C4=CC=C(C=C4)C(=O)O)C5=CC(=CC=C5)O
Chemical Name	4-[4-(3-hydroxyphenyl)-3-(4-methylphenyl)-6-oxo-1,4-dihydropyrrolo[3,4-d]pyrazol-5-yl]benzoic acid
Storage	Storage temperature: -20°C. Stability: ≥ 2 years
Note	For research use only
Expiration Date	12 months from date of receipt.

Biorbyt Ltd.
7 Signet Court, Swann Road
Cambridge
CB5 8LA
United Kingdom
Email: info@biorbyt.com, support@biorbyt.com
Phone: +44 (0)1223 859353 | Fax: +1 (415) 651-8558

Biorbyt LLC
68 TW Alexander Drive
Research Triangle Park
Durham
NC 27713-2847
United States
Email: info@biorbyt.com, support@biorbyt.com
Phone: +1 (415) 906-5211 | Fax: +1 (415) 651-8558