

Product Name : FG 7142

Synonyms : ZK 39106,LSU-65

Cat No. : M22444

CAS Number : 78538-74-6

Molecular Formula : C13H11N3O

Formula Weight : 225.25

Chemical Name : —

Description : FG 7142 also modulates GABA-induced chloride flux at GABAA receptors expressing the $\alpha 1$ subunit ($EC_{50} = 137$ nM). FG 7142 can increase tyrosine hydroxylation and cause upregulation of β -adrenoceptors in mouse cerebral cortex. FG 7142, a non-selectively benzodiazepine inverse agonist, has high affinity for the $\alpha 1$ subunit-containing GABAA receptor ($K_i = 91$ nM). FG-7142 has a high efficacy in modulating GABA-induced chloride flux at GABAA receptors expressing the $\alpha 1$ subunit ($EC_{50} = 137$ nM) as compared to the other α subunits. FG-7142 has affinity for those expressing the α subunit, the K_i values are 91 nM; 330 nM; 492 nM and 2.150 μ M for $\alpha 1$, $\alpha 2$, $\alpha 3$ and $\alpha 5$ subunits, respectively. FG-7142 (intraperitoneal injection; 15 mg/kg) increases tyrosine hydroxylase activity and dopamine turnover in the medial prefrontal cortex and ventral tegmentum in vivo, but effects are not detected in mesolimbic or nigrostriatal areas. FG-7142 (intraperitoneal injection; 15-30 mg/kg) activates mesolimbocortical dopaminergic projections, leading to increases in dopamine in the prefrontal cortex and the nucleus accumbens in rats.

Pathway : Others

Target : Other Targets

Receptor : GABAA receptor

Solubility : —

SMILES : CNC(=O)c1cc2c(c[n1])[nH]c1ccccc21

Storage : (-20°C)

Stability : ≥ 2 years

Reference :

1. Cottone P, et al. FG 7142 specifically reduces meal size and the rate and regularity of sustained feeding in female rats: evidence that benzodiazepine inverse agonists reduce food palatability. *Neuropsychopharmacology*. 2007 May;32(5):1069-81. Epub 2006 Nov 1.