

# 6,2'-Dihydroxyflavone

Catalog No: tcsc0040249



## Available Sizes

Size: 50mg



## Specifications

### CAS No:

92439-20-8

### Formula:

$C_{15}H_{10}O_4$

### Pathway:

Neuronal Signaling; Membrane Transporter/Ion Channel

### Target:

GABA Receptor; GABA Receptor

### Purity / Grade:

>98%

### Solubility:

DMSO : 155 mg/mL (609.66 mM; Need ultrasonic and warming)

### Observed Molecular Weight:

254.24

## Product Description

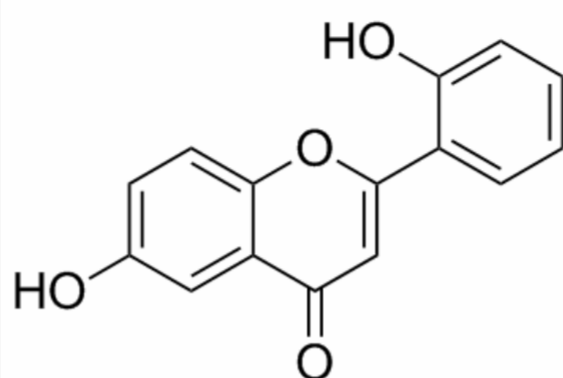
6,2'-Dihydroxyflavone is a novel antagonist of **GABA<sub>A</sub> receptor**.

IC<sub>50</sub> & Target: GABA<sub>A</sub> receptor<sup>[1]</sup>

**In Vitro:** 6,2'-Dihydroxyflavone is a novel antagonist of GABA<sub>A</sub> receptor. 6,2'-Dihydroxyflavone inhibits [<sup>3</sup>H]-flunitrazepam binding to the rat cerebral cortex membranes with a K<sub>i</sub> of 37.2±4.5 nM. The current elicited with the EC<sub>50</sub> concentration of GABA is decreased to 73.6±1.9% of control by co-application of 5 μM 6,2'-Dihydroxyflavone (n=5), compare to a decrease to 65.9±3.0% by 1 μM FG-7142 (n=5). The EC<sub>50</sub> for GABA dose response increases from 47.6 to 59.7 μM upon co-application of 5 μM 6,2'-

Dihydroxyflavone, and the maximal GABA-current is decreased<sup>[1]</sup>.

**In Vivo:** 6,2'-Dihydroxyflavone-treated mice exhibit significant differences from control mice with respect to the percentage of open arms entries [ $F_{(4,73)}=8.01$ ,  $P(4,73)=5.19$ ,  $P(4,73)=0.79$ ,  $P=0.54$ ]. The post-hoc Newman-Keuls' tests confirm that 6,2'-Dihydroxyflavone significantly decreases the percentage of open arm entries and time spent in open arms at the doses of 8 and 16 mg/kg. 6,2'-Dihydroxyflavone treatment similarly increases step-through latency [ $F_{(4,75)}=4.71$ ,  $P[1]$ ].



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