



# **Nefiracetam**

Catalog No: tcsc2382



## **Available Sizes**

Size: 50mg

Size: 100mg



# **Specifications**

**CAS No:** 

77191-36-7

#### Formula:

 $C_{14}^{H}_{18}^{N}_{2}^{O}_{2}^{O}$ 

#### **Pathway:**

Neuronal Signaling; Membrane Transporter/Ion Channel

### **Target:**

GABA Receptor; GABA Receptor

### **Purity / Grade:**

>98%

### **Solubility:**

10 mM in DMSO

#### **Alternative Names:**

DM9384;DZL-221

### **Observed Molecular Weight:**

246.3

# **Product Description**

Nefiracetam is a GABAergic, cholinergic, and monoaminergic neuronal systems enhancer for Ro 5-4864-induced convulsions.





Target: GABA Receptor

Nefiracetam induces a short-term depression of ACh-evoked currents at submicromolar concentrations (0.01-0.1  $\mu$ M) and a long-term enhancement of the currents at micromolar concentrations (1-10  $\mu$ M). Nefiracetam interacts with PKA and PKC pathways, which may explain a cellular mechanism for the action of cognition-enhancing agents. Lower (submicromolar) concentrations of the nootropic Nefiracetam reduces ACh-evoked currents to 30% (0.01  $\mu$ M) and 38% (0.1  $\mu$ M) of control after a 10-minute treatment [1].

Nefiracetam administered orally inhibits Ro 5-4864-induced convulsions in EL mice. Nefiracetam also efficiently inhibits Ro 5-4864-induced convulsions in DDY mice at doses higher than 10 mg/kg [2]. Nefiracetam administered daily 1 hour before each training session facilitates the acquisition process of the avoidance response [3].

All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!