Vigabatrin
Item No. 9000976

CAS Registry No.: 68506-86-5
Formal Name: 4-amino-5-hexenoic acid
Synonym: γ-Vinyl GABA
MF: C₆H₁₁NO₂
FW: 129.2
Purity: ≥ 95%
Supplied as: A crystalline solid
Storage: -20°C
Stability: ≥ 2 years

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

Vigabatrin is supplied as a crystalline solid. Aqueous solutions of vigabatrin can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of vigabatrin in PBS, pH 7.2, is approximately 10 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Vigabatrin is an irreversible GABA transaminase (GABA-T) inhibitor.¹ It inhibits rat brain GABA-T when used at a concentration of 0.1 mM. Vigabatrin is selective for rat brain GABA-T over P. fluorescens GABA-T at 10 mM and is 100-fold selective over rat brain glutamic acid decarboxylase (GAD). Vigabatrin (1,500 mg/kg) decreases brain GABA-T activity without affecting GAD activity in mice.² It reduces the incidence of myoclonus in a mouse model of audiogenic seizures.³ Vigabatrin also increases the electroconvulsive threshold in mouse model of maximal electroshock-induced seizures and reduces the number of clonic convulsions induced by pentylenetetrazol (PTZ; Item No. 18682) in mice.⁴ Formulations containing vigabatrin have been used in the treatment of seizures and infantile spasms.

References