



## **Primidone**

Catalog No: tcsc2381



**Available Sizes** 

Size: 100mg



**Specifications** 

CAS No:

125-33-7

Formula:

 $C_{12}H_{14}N_2O_2$ 

**Pathway:** 

Neuronal Signaling; Membrane Transporter/Ion Channel

**Target:** 

GABA Receptor; GABA Receptor

**Purity / Grade:** 

>98%

**Solubility:** 

10 mM in DMSO

**Observed Molecular Weight:** 

218.25

## **Product Description**

Primidone is an anticonvulsant of the pyrimidinedione class.

Target: GABA Receptor

Primidone is an anticonvulsant of the pyrimidinedione class, the active metabolites of which, phenobarbital (minor) and phenylethylmalonamide (PEMA) (major), are also anticonvulsants. It is believed to work via interactions with voltage-gated sodium channels which inhibit high-frequency repetitive firing of action potentials [1]. The effect of primidone in essential tremor is not mediated by PEMA.[76] The major metabolite, phenobarbital, is also a potent anticonvulsant in its own right and likely contributes to





primidone\'s effects in many forms of epilepsy [2]. Primidone and the other enzyme-inducing anticonvulsants can cut the half-life of antipyrine roughly in half (6.2  $\pm$  1.9 h vs. 11.2  $\pm$  4.2 h), and increases the clearance rate by almost 70%. Phenobarbital reduces the half-life to 4.8  $\pm$  1.3 and increases the clearance by almost 109% [3].

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