

# **Ethosuximide**

Ethosuximide is an anticonvulsant medication used to treat absence seizures, or petit mal seizures, which are mostly seen in school-age children. This drug is a first line agent for this neurological disorder, and is preferred over similar drugs because it does not cause hepatotoxicity. The mechanism of action for ethosuximide is blocking thalamic t-type Ca<sup>2+</sup> channels, leading to decreased neuronal transmission. Side effects of this drug include Stevens-Johnson syndrome, which is a life-threatening skin and mucous membrane hypersensitivity reaction, fatigue, and diarrhea, while constipation can occur in some.



**PLAY PICMONIC** 

#### Indications

#### First Line Absence Seizure Treatment

### First-place Absent-mind Caesar

Ethosuxamide is used as a first line agent to treat absence seizures (petit mal seizures), and is preferred over other agents because this drug does not cause hepatotoxicity.

# Mechanism of Action

## Blocks Thalamic T-Type Ca2+ Channels

# Block-guy blocking Thor-T on Calcium-cow at Channel

This medication binds and blocks thalamic T-type  $Ca^{2+}$  channels. T-type channels serve pacemaking functions in both central neurons and support calcium signaling, and are also involved in the modulation of firing patterns of neurons.

## **Side Effects**

# Stevens-Johnson Syndrome

#### Steve-Johns

Ethosuxamide can trigger Stevens-Johnson syndrome. Stevens-Johnson syndrome is a life threatening skin condition, which is a hypersensitivity complex affecting the skin and mucous membranes.

## Fatigue

## Sleepy-guy

Patients taking ethosuximide can complain of fatigue, as this is a common side effect.

### Diarrhea

#### **Toilet**

Patients taking this drug often have the side effect of diarrhea and GI upset. Constipation can also occur.