

Common mechanisms of antiseizure medication action

| Drug | Na ⁺ channels | Ca ⁺ channels | K ⁺ channels | Inhibitory transmission | Excitatory transmission | SV2A binding |
|-----------------|--------------------------|--------------------------|-------------------------|-------------------------|-------------------------|--------------|
| Benzodiazepines | | | | +++ | | |
| Brivaracetam | | | | | | +++ |
| Cannabidiol | | | | ++ | | |
| Carbamazepine | +++ | + | | | | |
| Cenobamate | ++ | | | + | | |
| Clobazam | | | | +++ | | |
| Eslicarbazepine | +++ | | | | | |
| Ethosuximide | | +++ | | | | |
| Felbamate | ++ | + | | ++ | ++ | |
| Gabapentin | | ++ | | ++ | | |
| Lacosamide | +++ | | | | | |
| Lamotrigine | +++ | + | | | | |
| Levetiracetam | | + | + | + | + | +++ |
| Oxcarbazepine | +++ | + | + | | | |
| Perampanel | | | | | +++ | |
| Phenobarbital | | + | | +++ | + | |
| Phenytoin | +++ | + | | | | |
| Pregabalin | | ++ | | ++ | | |
| Primidone | | + | | +++ | + | |
| Rufinamide | +++ | | | | | |
| Stiripentol | | | | +++ | | |
| Tiagabine | | | | +++ | | |
| Topiramate | ++ | ++ | | ++ | ++ | |
| Valproate | + | + | | ++ | + | |
| Vigabatrin | | | | +++ | | |
| Zonisamide | ++ | ++ | | | | |

+++; primary action; ++; probable action; +; possible action.

SV2A: synaptic vesicle protein 2A.

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