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Magnesium Valproate

National Cancer Institute

Source

National Cancer Institute. *Magnesium Valproate*. NCI Thesaurus. Code C71156.

The magnesium salt of valproic acid (2-propylpentanoic acid) with antiepileptic and potential antineoplastic activities. Magnesium valproate dissociates in the gastrointestinal tract and is absorbed into the circulation as magnesium ions and valproic acid ions; valproic acid may inhibit histone deacetylases, inducing tumor cell differentiation, apoptosis, and growth arrest. In addition, valproic acid exerts an antiepileptic effect, likely by inhibiting enzymes that catabolize the inhibitory neurotransmitter gamma-aminobutyric acid (GABA) catabolism and so increasing concentrations of GABA in the central nervous system (CNS). The presence of the magnesium in this agent may contribute to its anticonvulsant activity and sedative properties.