



# Phenytoin (1.BB.921): sc-71887

## BACKGROUND

Phenytoin is clinically used as an antiepileptic on patients with seizures. It functions in the motor cortex by stabilizing the threshold against hyperexcitability caused by excessive stimulation or environmental changes that reduce the membrane sodium gradient, thereby dampening unwanted brain activity. Phenytoin is mainly excreted in the bile as inactive metabolites which are then reabsorbed in the intestinal tract and excreted in the urine. Phenytoin overdose can cause sedation, cerebellar ataxia and ophthalmoparesis, as well as paradoxical seizures. Phenytoin also commonly causes gingival hyperplasia due to folate deficiency. It may accumulate in the cerebral cortex over long periods of time, and may cause atrophy of the cerebellum when administered at chronically high levels. Despite these risks, Phenytoin has a long history of safe use.

## REFERENCES

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4. Keele, N.B. 2001. Phenytoin inhibits isolation-induced aggression specifically in serotonin. *Neuroreport* 12: 1107-1112.
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## STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) or our catalog for detailed protocols and support products.

## SOURCE

Phenytoin (1.BB.921) is a mouse monoclonal antibody raised against Phenytoin.

## PRODUCT

Each vial contains 100 µl ascites containing IgG<sub>1</sub> with < 0.1% sodium azide.

## APPLICATIONS

Phenytoin (1.BB.921) is recommended for detection of Phenytoin by solid phase ELISA (starting dilution to be determined by researcher, dilution range 1:100-1:5000).

## RESEARCH USE

For research use only, not for use in diagnostic procedures.