

# Quinidine (504): sc-57992

## BACKGROUND

Quinidine is a class I antiarrhythmic agent first obtained from the bark of the *Cinchona* tree. It is a stereoisomer of quinine that functions by blocking the fast inward sodium current, causing the phase 0 depolarization of the cardiac action potential to decrease and prolonging the cardiac action potential, thereby prolonging the QT interval on the surface EKG. Quinidine also blocks the slowly inactivating tetrodotoxin-sensitive sodium current, the slow inward calcium current, the rapid and slow components of the delayed potassium rectifier current, the inward potassium rectifier current and the ATP-sensitive potassium channel. Quinidine inhibits the cytochrome P450 enzyme 2D6, and it may lead to increased blood levels of lidocaine,  $\beta$  blockers, opioids and some antidepressants. Quinidine has a half life of six to eight hours, a molecular weight of 324.417 g/mol and is metabolized in the liver by the cytochrome P450 system.

## REFERENCES

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## SOURCE

Quinidine (504) is a mouse monoclonal antibody raised against Quinidine.

## RESEARCH USE

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

## PRODUCT

Each vial contains 100  $\mu$ g IgG<sub>1</sub> in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

Quinidine (504) is recommended for detection of Quinidine by solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

## STORAGE

Store at 4° C, **\*\*DO NOT FREEZE\*\***. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## PROTOCOLS

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