

Guinea Pig Ventricular IKrWT-CR01-SM

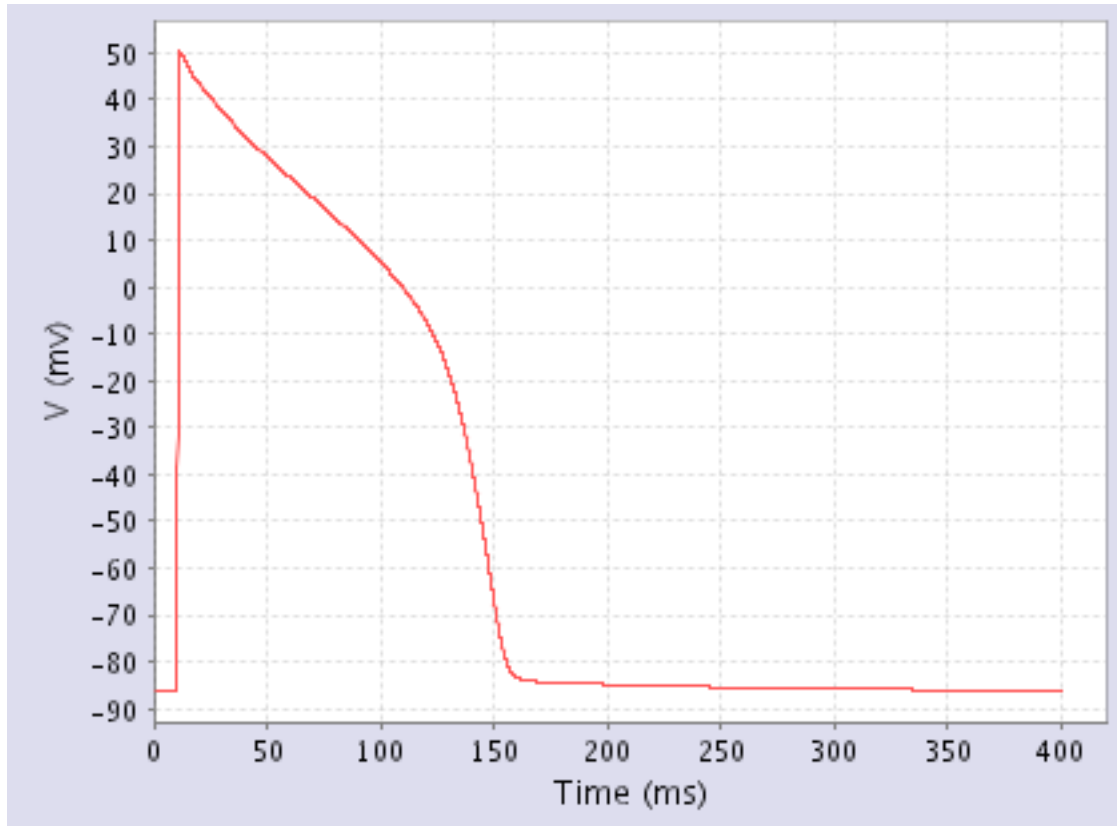
Simucore Model Based Upon: Clancy-Rudy Markovian Model of Wild-Type IKr Channels in a Cardiac Ventricular Cell, 2001; v.

1.4

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1 Description



This model simulates guinea pig ventricular action potentials. The original Hodgkin-Huxley type formulation of the rapid component of the delayed-rectifier potassium current (I_{Kr}) was replaced with the Markovian one. It includes three closed states (C3, C2 and C1), an open, conducting state (O), and a single inactivation state (I).

Abstract excerpt: "We developed Markovian models of wild-type (WT) and mutant $I(Kr)$ channels and incorporated these models into a comprehensive model of the cardiac ventricular cell."

2 References

- Clancy CE, Rudy Y.
Cellular consequences of HERG mutations in the long QT syndrome: precursors to sudden cardiac death.
Cardiovasc Res. 2001 May;50(2):301-13.
PMID: [11334834](https://pubmed.ncbi.nlm.nih.gov/11334834/)

3 Ordering

- [Order this model](#) or [request further information](#).