A

Combined Scheme 5 and 6

$$C \overset{\alpha}{\underset{\beta}{\longleftrightarrow}} O \overset{\gamma}{\underset{\delta}{\longleftrightarrow}} I$$

$$\kappa c \updownarrow \lambda \qquad \kappa c \updownarrow \lambda$$

$$B \overset{\gamma}{\underset{\delta}{\longleftrightarrow}} B$$

B

C

D

FIGURE S4. Effects of a combined open and inactivated state block of an inactivating three-state channel model (Scheme 5 and 6). (*A*) and (*B*) Kinetic scheme and computed time course of open probability for fast, slow and intermediate rates of block. Same symbols, parameters and equations as used in Fig. 2*B* of the main paper. (*C*) Computed steady-state inactivation curve. Same parameter values as in Fig. 4*A* of the main paper. (*D*) Recovery from inactivation. Same parameter values as in Fig. 4*C* of the main paper. In summary, the hybrid scheme shows similarities to Scheme 5 with regard to effects on time course, except for the important difference of not showing a crossing-over effect, and similarities to Scheme 6 with regard to effects on inactivation and recovery curves.