

SUPPLEMENTAL DATA FOR THE MANUSCRIPT

Inhibition of Phosphorylation of Na⁺,K⁺-ATPase by Mutations Causing Familial Hemiplegic
Migraine

by

Vivien Rodacker Schack, Rikke Holm, and Bente Vilsen

TABLE S1

Distance between Na⁺,K⁺-ATPase residues E700 and K724, or the corresponding E689 and K713 residues in the Ca²⁺-ATPase, in various crystal structures (Protein Data Bank codes indicated in parentheses).

E2 states Na,K-ATPase	E700–K724 (Å)
Na,K-ATPase, E2-MgF-K (2ZXE)	4.63
Na,K-ATPase, E2-MgF-Rb (3B8E)	5.22
E2 states Ca-ATPase	E689–K713
Ca-ATPase, E2-MgF-ADP-Tg (1WPG)	5.21, 4.64*
Ca-ATPase, E2-AIF-Tg (2ZBG)	4.55
Ca-ATPase, E2-AIF-Tg (1XP5)	3.19
Ca-ATPase, E2-AIF-Tg-TNPAMP (3AR8)	5.10
Ca-ATPase, E2-AIF-AMPPCP (3B9R)	3.36, 3.56*
Ca-ATPase, E2-AIF (3N5K)	3.43, 4.37*
Ca-ATPase, E2-Tg-ADP (3AR3)	5.59
Ca-ATPase, E2-Tg-ATP (3AR4)	3.95
Ca-ATPase, E2-Tg-TNPAMP (3AR5)	3.42
Ca-ATPase, E2-Tg-TNPADP (3AR6)	3.21
Ca-ATPase, E2-Tg-TNPATP (3AR7)	4.25
Ca-ATPase, E2-BeF-Tg-TNPAMP (3AR9)	5.35
Ca-ATPase, E2-BeF-Tg (2ZBF)	5.39
Ca-ATPase, E2-Tg-AMPPCP (2DQS)	5.19
Ca-ATPase, E2-BeF (3B9B)	3.54
Ca-ATPase, E2-Tg (1IWO)	2.68 (2 nd O 3.19)
Ca-ATPase, E2-MgF-CPA-AMPPCP (3FGO)	3.61, 4.15*
E1 states Ca-ATPase	
Ca-ATPase, E1-Ca (1SU4)	3.67
Ca-ATPase, E1-Ca-AMPPCP (1VFP)	3.56
Ca-ATPase, E1-Ca-AMPPCP (3AR2)	5.14
Ca-ATPase, E1-Ca-AMPPCP (1T5S)	3.53
Ca-ATPase, E1-Ca-AMPPCP (3N8G)	4.05
Ca-ATPase, E1-Ca-AIF-ADP (2ZBD)	4.94
Ca-ATPase, E1-Ca-AIF-ADP (1T5T)	3.19
Ca-ATPase, E1P-Ca-AMPPN (3BA6)	4.42

*indicates that the asymmetric unit of the crystal lattice consists of 2 or 4 molecules with two different distances as indicated.