



Kv4.3 with KChIP1 Protein Crystal

Catalog: CBCRY08

PRODUCT INFORMATION

Name	Kv4.3 with KChIP1 Protein Crystal
Cat No.	CBCRY08
Fragment	N-terminal domain Residues 6-145
Protein Description	Potassium channel Kv4.3 complexed with regulatory subunit KChIP1
Background	The structure reveals a unique clamping action of the complex, in which a single KChIP1 molecule, as a monomer, laterally clamps two neighboring Kv4.3 N-termini in a 4:4 manner, forming an octamer. The proximal N-terminal peptide of Kv4.3 is sequestered by its binding to an elongated groove on the surface of KChIP1, which is indispensable for the modulation of Kv4.3 by KChIP1, and the same KChIP1 molecule binds to an adjacent T1 domain to stabilize the tetrameric Kv4.3 channels.
Protein Classification	membrane protein
Structure Weight	75748.88 Da
Method	X-Ray Diffraction
Resolution	3.2 Å
Ligand Chemical Component	Calcium ion; Zinc ion
Reference	Wang, H., Yan, Y., Liu, Q., Huang, Y., Shen, Y., Chen, L., Chen, Y., Yang, Q., Hao, Q., Wang, K., Chai, J. (2007) Structural basis for modulation of Kv4 K(+) channels by auxiliary KChIP subunits. Nat.Neurosci. 10: 32-39