



Kv4.3 with KChIP1 Protein Crystal

Catalog: CBCRY08

PRODUCT INFORMATION

Product Name	Kv4.3 with KChIP1 Protein Crystal
Catalog Number	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
PDBID	2NZ0
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
cDNA Length	540 (KCNIP1) 420 (KCNA3)

USAGE GUIDELINES

General Handling	Avoid excessive mixing or vortexing to prevent aggregation. Long-term storage above -80°C may result in aggregate formation. Thaw on ice before use.
Storage	Short term: +2°C to +8°C (up to 1 week) Long term: -80°C (stable for 12 months)
Stability	Stable for 12 months at -80°C. Avoid repeated freeze-thaw cycles.
Freeze / Thaw	Can be frozen, but limit to ?3 freeze/thaw cycles to maintain particle integrity.

Important: This product is for **research use only**. Not intended for diagnostic or therapeutic applications. Please refer to the Safety Data Sheet (SDS) for complete handling and safety information.