



CASP3 Protein Crystal

Catalog: CBCRY39

PRODUCT INFORMATION

Product Name	CASP3 Protein Crystal
Catalog Number	CBCRY39
Fragment	Full length
Protein Description	Caspase-3
Background	Caspases exist as inactive proenzymes which undergo proteolytic processing at conserved aspartic residues to produce two subunits, large and small, that dimerize to form the active enzyme. This protein cleaves and activates caspases 6, 7 and 9, and the protein itself is processed by caspases 8, 9 and 10. It is the predominant caspase involved in the cleavage of amyloid-beta 4A precursor protein, which is associated with neuronal death in Alzheimer's disease. Alternative splicing of this gene results in two transcript variants that encode the same protein.
Protein Classification	hydrolase
Structure Weight	114694.18 Da
PDBID	3DEK
Method	X-Ray Diffraction
Resolution	2.4Å



Ligand Chemical Component	Cysteinesulfonic acid
Reference	Du, J.-Q., Wu, J., Zhang, H.-J., Zhang, Y.-H., Qiu, B.-Y., Wu, F., Chen, Y.-H., Li, J.-Y., Nan, F.-J., Ding, J.-P., Li, J. (2008) Isoquinoline-1,3,4-trione Derivatives Inactivate Caspase-3 by Generation of Reactive Oxygen Species J.Biol.Chem. 283: 30205-30215
cDNA Length	759

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.