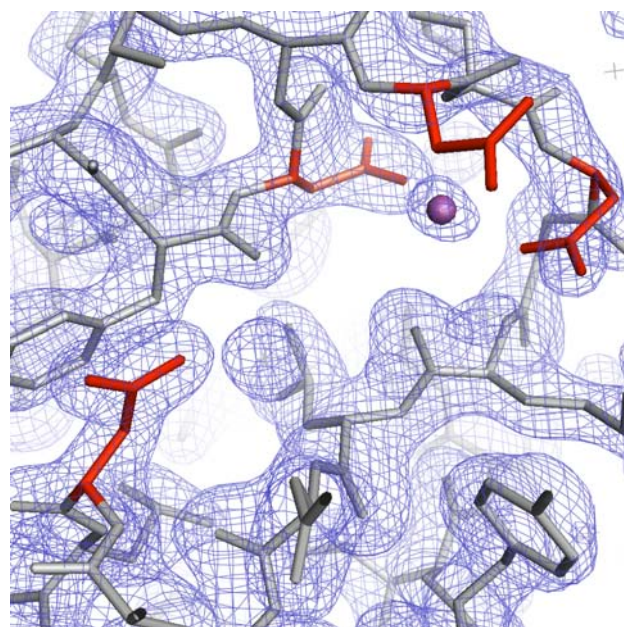
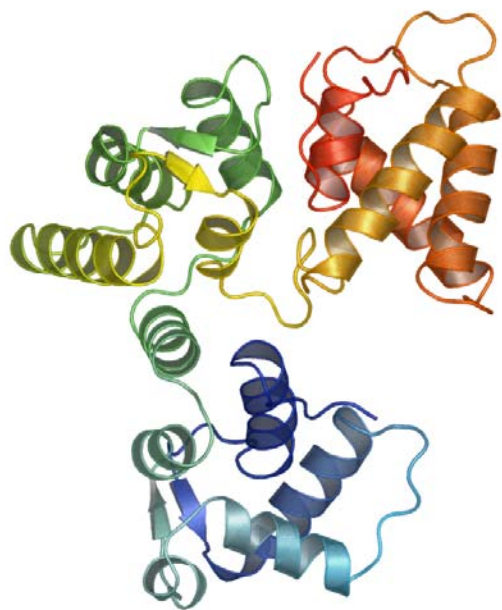


# Center for Eukaryotic Structural Genomics

## Protein Structure Data Summary

<b>Target ID</b>	GO.74073	
<b>Source Organism</b>	<i>Danio rerio</i>	
<b>Target Name</b>	BC083168	
<b>PDB Entry</b>	2BE4	Deposition: 21-Oct-2005
<b>Function</b>	EF-hand protein from <i>Danio rerio</i> (FF/Refine: 2Q4U)	
<b>Produced From</b>	<i>E. coli</i> B834, pRARE2, pVP-16	
<b>Structure by X-ray</b>	Resolution: 2.10 Å	R-value (R-free): 17.6% (25.3%)
	No. of Residues/ASU: 270 (271)	Complexes/ASU: 1
<b>Data Collected At</b>	Advanced Photon Source SBC 22-ID 10-Oct-2005	
<b>Authors</b>	E. Bitto, C.A. Bingman, G.E. Wesenberg, G.N. Phillips, Jr.	



### Structural Features

Dr.36843 encodes a novel hexa-EF-hand protein, showing 70% sequence identity to a human protein named "secretogorin" (Uniprot 076038). Human secretogorin is preferentially expressed in two tissues: islet cells of the pancreas and neuroendocrine cells. Analysis of the histochemical staining pattern of human secretogorin revealed a striking neuron-specific cerebral expression pattern. Interestingly, the protein is detectable in human serum after ischemic strokes. This structure of the calcium-free form of *D. rerio* putative-secretogorin reveals three independent domains, each of which contains a pair of EF-hand motifs, connected by short linkers.

<b>Percent Identity with Nearest PDB Structure at Time Solved</b>	1TCF (26% over 164 aa)
<b>Pfam Cluster</b>	Efhand (6) Dockerin_1, CMAS
<b>Sequence Cluster Size : Structures in PDB</b>	750 non-redundant genes at e<0.1

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