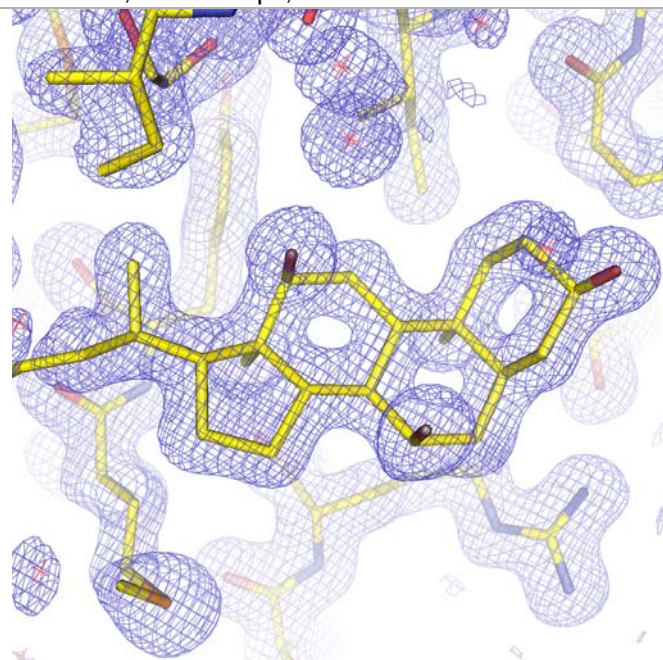
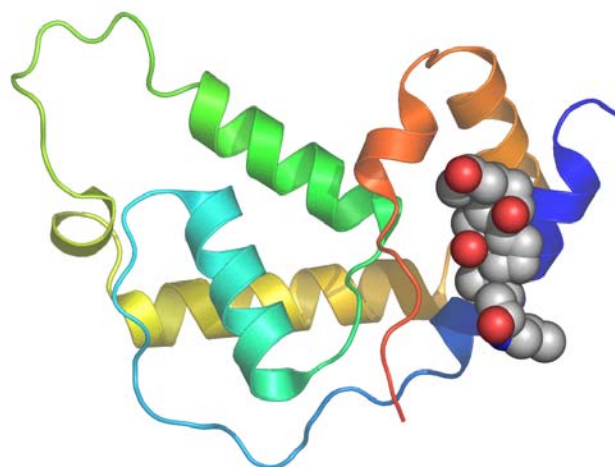


# Center for Eukaryotic Structural Genomics

## Protein Structure Data Summary

<b>Target ID</b>	GO.13974	
<b>Source Organism</b>	<i>Arabidopsis thaliana</i>	
<b>Target Name</b>	At3g22680.1	
<b>PDB Entry</b>	1VK5	Deposition: 06-May-2004
<b>Function</b>	binds CHAPS detergent in crystal (FF/Refine: 2Q3T)	
<b>Produced From</b>	<i>E. coli</i> B834(DE3) p(LacI+RARE)	
<b>Structure by X-ray</b>	Resolution: 1.60	R-value (R-free): 16.1% (18.4%)
	No. of Residues: 157 (17,924)	Subunits/Molecule: 1
<b>Data Collected At</b>	Advanced Photon Source BioCARS 14-BM-D 14-Feb-2004, COM-CAT 32-IDB 27-Feb-2004	
<b>Authors</b>	S.T.M. Allard, C.A. Bingman, D.W. Smith, G.N. Phillips, Jr.	



### Structural Features

At3g22680.1 appears to represent a new protein fold. The structure was solved by Se-Met MAD. At the time of selection and deposition, there was no significant sequence similarity to structures in the PDB. DALI searches revealed no significant structural similarity to any known protein fold. The quality of crystals of this protein was dramatically improved by including the detergent CHAPS. The above left figure shows CHAPS bound to At3g22680.1.

*References:* (1) Allard, S.T., Bingman, C.A., Johnson, K.A., Wesenberg, G.E., Bitto, E., Jeon, W.B., Phillips, G.N. Jr. (2005) Structure at 1.6 Å resolution of the protein from gene locus At3g22680 from *Arabidopsis thaliana*. *Acta Crystallogr Sect F Struct Biol Cryst Commun* 61(Pt 7):647-50.

<b>Percent Identity with Nearest PDB Structure at Time Solved</b>	none better than E=1
<b>Pfam Cluster</b>	Pfam-B_96548
<b>Protonet Cluster Size : Structures in PDB</b>	108 : 1

Center for Eukaryotic Structural Genomics (CESG), University of Wisconsin-Madison Biochemistry Department, 433 Babcock Drive, Madison, WI 53706-1549; phone: 608.263.2183; fax: 608.890.1942; email: [cesginfo@biochem.wisc.edu](mailto:cesginfo@biochem.wisc.edu); website: <http://www.uwstructuralgenomics.org>. This research funded by NIH / NIGMS Protein Structure Initiative grants U54 GM074901 and P50 GM064598.