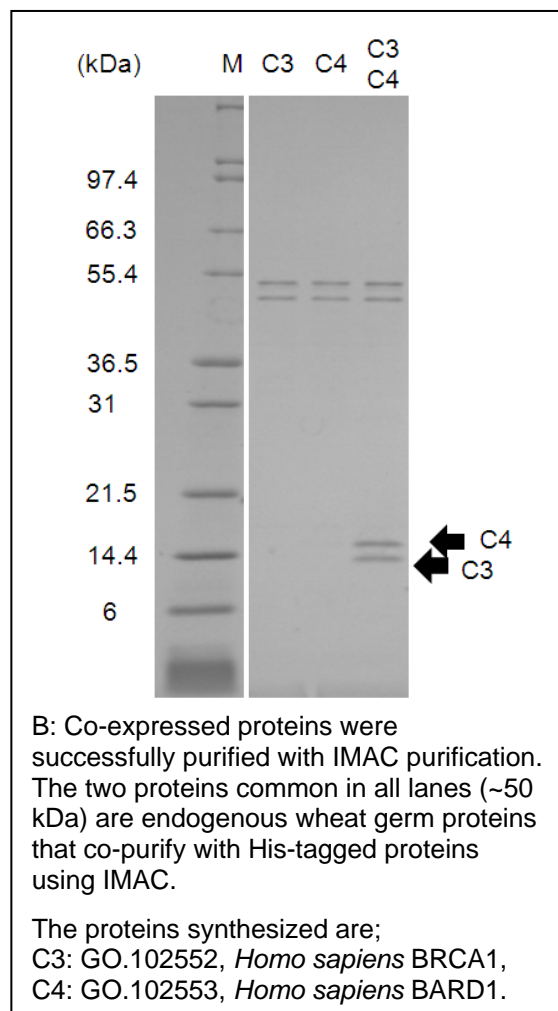
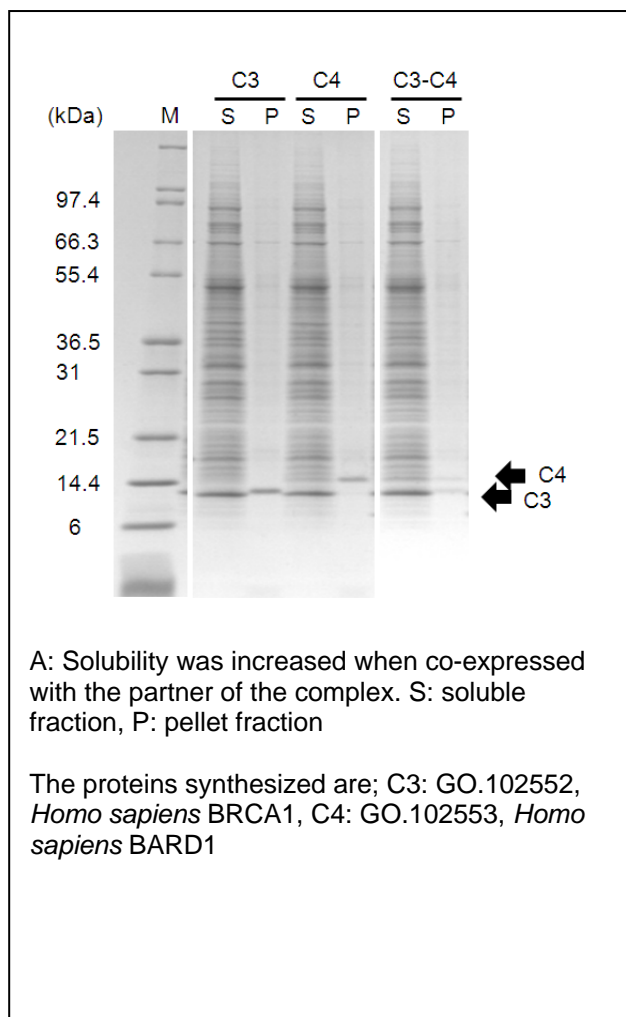


Center for Eukaryotic Structural Genomics

Technology Dissemination Report

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|-----------------------------|--|
| CESG Tech Report No. | 021 |
| Title | Co-Expression of Protein:Protein Complexes Using a Wheat Germ Cell-Free System |
| Research Unit | Cell-Free Protein Production |
| Authors | Makino S., Primm J.G., and Fox B.G. |
| Primary Contact | igprimm@wisc.edu |



Summary

We have begun work on targets which form protein:protein complexes. To establish viability of our approach, a workgroup (WG) of known heterodimeric complexes was selected. This WG is being tested in both cell-based and cell-free expression systems. Using the test protein pair *Homo sapiens* BRCA1:BARD1, (PDB:1JM7) previously expressed in *E. coli*, we have seen marked improvement in solubility and ease of purification when the proteins are co-expressed in the cell-free system. In this experiment separate vectors were combined in a single cell-free reaction vessel which allowed the complex to form at the time of synthesis. When the targets are expressed without the partner, they are insoluble in the system.

Acquiring the Technology Contact Brian Fox bgfox@biochem.wisc.edu.

Other Acknowledgements Not Applicable

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