

Original publications using the DUALmembrane system

The Cyanobacterial Homologue of HCF 136/YCF48 Is a Component of an Early Photosystem II Assembly Complex and Is Important for Both the Efficient Assembly and Repair of Photosystem II in *Synechocystis* sp. PCC 6803. Komenda et al. *JBC* **283**:33 (2009)

Identifying components of the hair-cell interactome involved in cochlear amplification. Zheng et al. *BMC Genomics* **10**: 127 (2009)

Interactions between membrane-bound cellulose synthases involved in the synthesis of the secondary cell wall. Timmers et al. *FEBS Letters* **583**: 978-982 (2009)

Analysis of the Chloroplast Protein Kinase Stt7 during State Transitions. Lemeille et al. *PLoS Biol.* **7**(3): e1000045 (2009)

Cdc34p ubiquitin-conjugating enzyme is a component of the tombusvirus replicase complex and ubiquitinates p33 replication protein. Li et al. *J. Virol.* **82**(14):6911-26 (2008)

Bap31 is a novel target of the human papillomavirus E5 protein. Regan et al. *J. Virol.* **82**(20):10042-51 (2008)

Interaction assays in yeast and cultured cells confirm known and identify novel partners of the synaptic vesicle protein synaptophysin. Felkl et al. *Neuroscience* **156**: 344-352 (2008)

Negative regulation of the yeast ABC transporter YCF1P by phosphorylation within its N-terminal extension. Paumi et al. *J. Biol. Chem.* (2008) Jul 29

Mapping protein-protein interactions for the yeast ABC transporter Ycf1p by integrated split-ubiquitin membrane yeast two-hybrid analysis. Paumi et al. *Mol. Cell* **26**(1):15-25 (2007)

UNC-83 IS a KASH protein required for nuclear migration and is recruited to the outer nuclear membrane by a physical interaction with the SUN protein UNC-84. McGee et al. *Mol. Biol. Cell* **17**(4):1790-801 (2006)

Analysis of the oligomeric structure of the motor protein prestin. Zheng, J. et al. *J. Biol. Chem.* **281**(29):19916-19924 (2006)

Low PSII Accumulation Is Involved in Efficient Assembly of Photosystem II in *Arabidopsis thaliana*. Peng, L. et al. *Plant Cell* **18**(4):955-969 (2006)

G Protein-coupled Receptor Gpr4 Senses Amino Acids and Activates the cAMP-PKA Pathway in *Cryptococcus neoformans*. Xue, C. et al. *Mol. Biol. Cell* **17**(2):667-679 (2006)

The familial dementia BRI2 gene binds the Alzheimer's gene APP and inhibits Abeta production. Matsuda, S. et al. *J. Biol. Chem.* **280**: 28912-28916 (2005)

Large-scale identification of yeast integral membrane protein interactions. Miller, J.P. et al. *Proc. Natl. Acad. Sci USA* **102**: 12123-12128 (2005)

Erg28p is a key protein in the yeast sterol biosynthetic enzyme complex. Mo C., Bard, M. *J. Lipid Res.* **46**: 1991-1998 (2005)

The yeast split-ubiquitin system to study chloroplast membrane protein interactions. Pasch, J.C., Nickelsen, J., Schünemann, D. *Appl. Microbiol. Biotechnol.* **69**: 440-447 (2005)

Studies of yeast oligosaccharyl transferase subunits using the split-ubiquitin system: topological features and in vivo interactions. Yan, A., Wu, E., Lennarz, W.J. *Proc. Natl. Acad. Sci USA* **102**(20):7121-7126 (2005)

Subunits of the translocon interact with components of the oligosaccharyl transferase complex. Chavan, M.M., Yan, A., Lennarz, W.J. *J. Biol. Chem.* **280**: 22917-22924 (2005)

The ERG28-encoded protein, Erg28p, interacts with both the sterol C-4 demethylation enzyme complex as well as the late biosynthetic protein, the C-24 sterol methyltransferase (Erg6p). Mo, C., Valachovic, M., and Bard, M. *Biochim. Biophys. Acta* **1686**(1-2):30-6 (2004)

Use of the Split-Ubiquitin Two-Hybrid System to Identify Proteins Interacting With the Alzheimer Proteins APP and LRP. Vitale, R. and Buxbaum, J.D. *Biol. Bull.* **207**(2):167 (2004)

The yeast split-ubiquitin membrane protein two-hybrid screen identifies BAP31 as a regulator of the turnover of endoplasmic reticulum-associated protein tyrosine phosphatase-like B. Wang et al. *Mol. Cell Biol.* **24**(7):2767-78 (2004)

The Arabidopsis putative G protein-coupled receptor GCR1 interacts with the G protein alpha subunit GPA1 and regulates abscisic acid signaling. Pandey, S. and Assmann, S.M. *Plant Cell* **16**(6):1616-32 (2004)

Identification of Novel ErbB3-interacting Factors Using the Split-Ubiquitin Membrane Yeast Two-Hybrid System Thaminy et al. *Genome Research* **13**:1744-53 (2003)

A genetic system based on split-ubiquitin for the analysis of interactions between membrane proteins in vivo. Stagljar et al. *Proc. Natl. Acad. Sci.* **95**, 5187-5192 (1998)

Reviews about the DUALmembrane system

Methods for mapping of interaction networks involving membrane proteins. Hooker B.S., Bigelow D.J., Lin C.T. *Biochem. Biophys. Res. Commun.* Sep 19 (2007) epub ahead of print.

Yeast-based functional genomics and proteomics technologies: the first 15 years and beyond. Suter, B., Auerbach, D. and Stagljar, I. *Biotechniques* **40**(5), 625-644 (2006).

Proteomic approaches for generating comprehensive protein interaction maps. Auerbach, D., Fetchko, M, and Stagljar, I. *Targets (Drug Discovery Today)* **2**, 85-92 (2003)

The post-genomic era of interactive proteomics: Facts and perspectives. Auerbach, D., Thaminy, S., Hottiger, M., and Stagljar, I. *Proteomics* **2**, 611-623 (2002)

Genetic approaches to the identification of interactions between membrane proteins in yeast. Auerbach, D., Galeuchet-Schenk, B., Hottiger, M.O., and Stagljar, I. *J. Recept. Signal Transduct. Res.* **22**, 473-483 (2002)

Analysis of membrane protein interactions using yeast-based technologies. Stagljar, I. and Fields, S. *Trends Biochem. Sci.* **27**, 559-563 (2002)

Original publications using the DUALhunter system

Yeast split-ubiquitin-based cytosolic screening system to detect interactions between transcriptionally active proteins. Möckli et al. *BioTechniques* **42**(6):725-730 (2007)

Selected publications using the DUALhybrid system

Molecular dissection of NRG1-ERBB4 signaling implicates PTPRZ1 as a potential schizophrenia susceptibility gene. Buxbaum et al. *Mol. Psychiatry.* Apr 17 (2007)

XLF Interacts with the XRCC4-DNA Ligase IV Complex to Promote DNA Nonhomologous End-Joining. Ahnesorg et al. *Cell* **124**(2), 301-313 (2006)

Promyelocytic leukemia zinc finger protein localizes to the cochlear outer hair cells and interacts with prestin, the outer hair cell motor protein Nagy et al. *Hearing Research* **204**, 216-222 (2005)

NEDD8 Ultimate Buster-1L Interacts with the Ubiquitin-like Protein FAT10 and Accelerates Its Degradation. Hipp et al. *J. Biol. Chem.* **279** (16), 16503-16510 (2004)

Brain-type creatine kinase BB-CK interacts with the Golgi Matrix Protein GM130 in early prophase. Burklen et al. *Mol. Cell. Biochem.* **297**, 53-64 (2007)