

Publications

David Fushman

Articles:

1. D. Fushman, O. Walker "Exploring linkage dependence of polyubiquitin conformations using molecular modeling", *J. Mol. Biol.* (2010); Web publication: Oct 22, 2009.
2. D. Zhang, T. Chen, I. Ziv, R. Rosenzweig, V. Bronner, Y. Matiuhin, M. H. Glickman, D. Fushman "Together, Rpn10 and Dsk2 can serve as a polyubiquitin chain-length sensor", *Molecular Cell* (2009), *36*, 1018-1033
3. K. Berlin, D. P. O'Leary, D. Fushman "Improvement and Analysis of Computational Methods for Prediction of Residual Dipolar Couplings", *J. Magn. Reson* (2009) *201*, 25-33
4. L. Cai, D. Fushman, D. Kosov "Density functional calculations of ^{15}N chemical shifts in solvated dipeptides" *J. Biomol. NMR* (2009) *45*, 245-253
5. N. Zhang, Q. Wang, A. Ehlinger, L. Randles, J. W. Lary, Y. Kang, A. Haririnia, A. J. Storaska, J. L. Cole, D. Fushman, K. J. Walters "Structure of the S5a:K48 linked diubiquitin complex and its interactions with Rpn13", *Molecular Cell* (2009) *35*, 280-290
6. J. J. Sims, A. Haririnia, B. C. Dickinson, D. Fushman, R. E. Cohen "Avid interactions underlie the K63-linked polyubiquitin binding specificities observed for UBA domains" *Nature Structural & Molecular Biology* (2009) *16*, 883-889
7. T. Wang, L. Yin, E. M. Cooper, M.-Y. Lai, S. Dickey, C. M. Pickart, D. Fushman, K. D. Wilkinson, R. E. Cohen, C. Wolberger, "Evidence for bidentate substrate binding as the basis for the K48 linkage specificity of Otubain 1," *J. Mol. Biol.* (2009) *386*, 1011-23
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9. L. Cai, D. Fushman, D. Kosov "Density functional calculations of ^{15}N chemical shifts in solvated dipeptides," *J. Biomol. NMR* (2008) *42*, 77-88
10. D. Zhang, S. Raasi, D. Fushman "Affinity makes the difference: non-selective interaction of the UBA domain of ubiquitin-1 with monomeric ubiquitin and polyubiquitin chains", *J. Mol. Biol.* (2008) *377*, 162-180.
11. A. Haririnia, R. Verma, N. Purohit, M.Z. Twarog, R.J. Deshaies, D. Bolon, D. Fushman "Mutations in the Hydrophobic Core of Ubiquitin Differentially Affect its Recognition by Receptor Proteins", *J. Mol. Biol.* (2008) *375*, 979-996.
12. Y. Ryabov, D. Fushman, "Structural assembly of multidomain proteins and protein complexes guided by the overall rotational diffusion tensor," *J. Am. Chem. Soc.* (2007) *129*, 7894-7902.
13. M. Sadqi, D. Fushman, V. Muñoz "Analysis of 'downhill' protein folding:

- Analysis of protein-folding cooperativity (Reply)" *Nature*, (2007) 445, E17-E18.
14. A. Haririnia, M. D'Onofrio, D. Fushman, "Mapping the interactions between Lys48- and Lys63-linked di-ubiquitins and a ubiquitin-interacting motif of S5a", *J. Mol. Biol.* (2007), 368, 753-766.
 15. M. J. Eddins, R. Varadan, D. Fushman, C. M. Pickart, C. Wolberger "Crystal structure and solution NMR studies of Lys48-linked tetraubiquitin at neutral pH", *J. Mol. Biol.* (2007) 367, 204-211.
 16. Ya. Ryabov, D.Fushman, "A Model of Interdomain Mobility in a Multi-Domain Protein", *J.Am.Chem.Soc.* (2007) 129, 3515-3527.
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 21. Ya. Ryabov, D.Fushman "Analysis of Interdomain Dynamics in a Two-Domain Protein Using Residual Dipolar Couplings Together with ^{15}N Relaxation Data" *Magnetic Resonance in Chemistry* (2006) 44, 143-151.
 22. J. B.Hall, D. Fushman "Variability of the ^{15}N Chemical Shielding Tensors in the B3 Domain of Protein G from ^{15}N Relaxation Measurements at Several Fields. Implications for Backbone Order Parameters" *J. Amer. Chem. Soc.* (2006) 128, 7855-7870.
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Chapters in books:

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