

ProteOn™ XPR36 Protein Interaction Array System Bibliography

Peer-Reviewed Publications

- Abdiche YN et al. (2008). Determining kinetics and affinities of protein interactions using a parallel real-time label-free biosensor, the Octet. *Anal Biochem* 377, 209–217.
- Abdiche YN et al. (2008). Probing the binding mechanism and affinity of tanezumab, a recombinant humanized anti-NGF monoclonal antibody, using a repertoire of biosensors. *Protein Sci* 17, 1326–1335.
- Abdiche YN et al. (2009). Exploring blocking assays using Octet, ProteOn, and Biacore biosensors. *Anal Biochem* 386, 172–180.
- Abdiche YN et al. (2011). Expanding the ProteOn XPR36 biosensor into a 36-ligand array expedites protein interaction analysis. *Anal Biochem* 411, 139–151.
- Abu-Hamad S et al. (2009). The VDAC1 N-terminus is essential both for apoptosis and the protective effect of anti-apoptotic proteins. *J Cell Sci* 122, 1906–1916.
- Aldridge C et al. (2010). The interaction dynamics of a negative feedback loop regulates flagellar number in *Salmonella enterica* serovar Typhimurium. *Mol Microbiol* 78, 1416–1430.
- Anderson GP et al. (2010). Binding kinetics of antiricin single domain antibodies and improved detection using a B chain specific binder. *Anal Chem* 82, 7202–7207.
- Anderson GP et al. (2011). Evaluation of anti-hemagglutinin Hn-33 single domain antibodies: kinetics, binding epitopes, and thermal stability. *The Botulinum J* 2, 59–71.
- Anderson GP et al. (2012). Comparison of immunoreactivity of staphylococcal enterotoxin B mutants for use as toxin surrogates. *Anal Chem* 84, 5198–5203.
- Appleton BA et al. (2007). Structural studies of neuropilin/antibody complexes provide insights into semaphorin and VEGF binding. *EMBO J* 26, 4902–4912.
- Araki K and Nagata K (2011). Functional in vitro analysis of the ERO1 protein and protein-disulfide isomerase pathway. *J Biol Chem* 286, 32705–32712.
- Arbel N and Shoshan-Barmatz V (2010). Voltage-dependent anion channel 1-based peptides interact with Bcl-2 to prevent antiapoptotic activity. *J Biol Chem* 285, 6053–6062.
- Artzy-Schnirman A et al. (2008). A two-state electronic antigen and an antibody selected to discriminate between these states. *Nano Lett* 8, 3398–3403.
- Arzoine L (2008). Voltage-dependent anion channel-1-based peptides interact with hexokinase to prevent its anti-apoptotic activity. *J Biol Chem* 284, 3946–3955.
- Bakchoul T et al. (2011). Low-avidity anti-HPA-1a alloantibodies are capable of antigen-positive platelet destruction in the NOD/SCID mouse model of alloimmune thrombocytopenia. *Transfusion* 51, 2455–2461.
- Balducci C et al. (2010). Synthetic amyloid-beta oligomers impair long-term memory independently of cellular prion protein. *Proc Natl Acad Sci U S A* 107, 2295–2300.
- Bayat B et al. (2010). Neutrophil transmigration mediated by the neutrophil-specific antigen CD177 is influenced by the endothelial S536N dimorphism of platelet endothelial cell adhesion molecule-1. *J Immunol* 184, 3889–3896.
- Biasini E (2009). Immunopurification of pathological prion protein aggregates. *PLoS One* 4, e7816.
- Boettcher A et al. (2010). Fragment-based screening by biochemical assays: systematic feasibility studies with trypsin and MMP12. *J Biomol Screen* 15, 1029–1041.
- Brambilla D et al. (2010). New method based on capillary electrophoresis with laser-induced fluorescence detection (CE-LIF) to monitor interaction between nanoparticles and the amyloid- β peptide. *Anal Chem* 82, 10083–10089.
- Bravman T et al. (2006). Exploring “one-shot” kinetics and small molecule analysis using the ProteOn XPR36 array biosensor. *Anal Biochem* 358, 281–288.
- Bravman T et al. (2008). The ProteOn XPR36 array system—high throughput kinetic binding analysis of biomolecular interactions. *Cell Mol Bioeng* 1, 216–228.
- Brehin AC et al. (2008). Production and characterization of mouse monoclonal antibodies reactive to Chikungunya envelope E2 glycoprotein. *Virology* 371, 185–195.
- Brod E et al. (2008). Electrical control over antibody-antigen binding. *Sens Actuators B* 128, 560–565.

- Bronner V et al. (2006). Therapeutic antibodies: discovery and development using the Proteon XPR36 biosensor interaction array system. *Anal Biochem* 406, 147–156.
- Bronner V et al. (2008). Evaluating candidate lead compounds by rapid analysis of drug interactions with human serum albumin. *Am Biotechnol Lab* 26, 14–16.
- Bronner V et al. (2010). Therapeutic antibodies: discovery and development using the ProteOn XPR36 biosensor interaction array system. *Anal Biochem* 406, 147–156.
- Casares N et al. (2010). A peptide inhibitor of FOXP3 impairs regulatory T cell activity and improves vaccine efficacy in mice. *J Immunol* 185, 5150–5159.
- Chen SB et al. (2011). Pharmacophore-based discovery of triaryl-substituted imidazole as new telomeric G-quadruplex ligand. *Bioorg Med Chem Lett* 21, 1004–1009.
- Cohavi O et al. (2009). Docking of antizyme to ornithine decarboxylase and antizyme inhibitor using experimental mutant and double-mutant cycle data. *J Mol Biol* 390, 503–515.
- Cohavi O et al. (2011). A quantitative, real-time assessment of binding of peptides and proteins to gold surfaces. *Chemistry* 17, 1327–1336.
- Cohen-Ben-Lulu G et al. (2008). The bacterial flagellar switch complex is getting more complex. *EMBO J* 27, 1134–1144.
- Colombo G et al. (2010). Non-peptidic thrombospondin-1-mimics as fibroblast growth factor-2 inhibitors: an integrated strategy for the development of new antiangiogenic compounds. *J Bio Chem* 285, 8733–8742.
- Colwill K et al. (2011). A roadmap to generate renewable protein binders to the human proteome. *Nat Methods* 8, 551–558.
- Craig-Barnes HA et al. (2010). Surfactant protein D interacts with alpha2-macroglobulin and increases its innate immune potential. *J Biol Chem* 285, 13461–13470.
- Dahan R et al. (2011). TCR-like antibodies distinguish conformational and functional differences in two- versus four-domain auto reactive MHC class II-peptide complexes. *Eur J Immunol* 41, 1465–1479.
- Deban L et al. (2010). Regulation of leukocyte recruitment by the long pentraxin PTX3. *Nat Immunol* 11, 328–334.
- Di Fede G et al. (2009). A recessive mutation in the APP gene with dominant-negative effect on amyloidogenesis. *Science* 323, 1473–1477.
- Di Fede G et al. (2012). Good gene, bad gene: New APP variant may be both. *Prog Neurobiol* [published online ahead of print June 19, 2012].
- Doppalapudi VR et al. (2010). Chemical generation of bispecific antibodies. *Proc Natl Acad Sci U S A* 107, 22611–22616.
- Dragoni E et al. (2009). Biotin-tagged probes for MMP expression and activation: design, synthesis, and binding properties. *Bioconjug Chem* 20, 719–727.
- Dubin-Bar D et al. (2008). The Drosophila IKK-related kinase (Ik2) and spindle-F proteins are part of a complex that regulates cytoskeleton organization during oogenesis. *BMC Cell Biol* 9, 51.
- Dubrac A et al. (2010). Functional divergence between 2 chemokines is conferred by single amino acid change. *Blood* 116, 4703–4711.
- Ezerzer C et al. (2009). Chemokine receptor-derived peptides as multi-target drug leads for the treatment of inflammatory diseases. *Peptides* 30, 1296–1305.
- Fridman Y et al. (2010). Subtle alterations in PCNA-partner interactions severely impair DNA replication and repair. *PLoS Biol* 8, e1000507.
- Gan J et al. (2007). Structural and biochemical analyses of shikimate dehydrogenase AroE from *Aquifex aeolicus*: implications for the catalytic mechanism. *Biochemistry* 46, 9513–9522.
- Gao X et al. (2010). p90 ribosomal S6 kinase 1 (RSK1) and the catalytic subunit of protein kinase A (PKA) compete for binding the pseudosubstrate region of PKAR1alpha: role in the regulation of PKA and RSKa activities. *J Biol Chem* 285, 6970–6979.
- Gasparian ME et al. (2009). Generation of new TRAIL mutants DR5-A and DR5-B with improved selectivity to death receptor 5. *Apoptosis* 14, 778–787.
- Gesuede R et al. (2009). Recombinant C1 inhibitor in brain ischemic injury. *Ann Neurol* 66, 332–342.
- Gevorgyan-Airapetov L et al. (2008). Interaction of Tim23 with Tim50 is essential for protein translocation by the mitochondrial TIM23 complex. *J Biol Chem* 284, 4865–4872.
- Gingras AR et al. (2011). Structural basis of mannan-binding lectin recognition by its associated aserine protease MASP-1: implications for complement activation. *Structure* 19, 1635–1643.
- Glaven RH et al. (2012). Linking single domain antibodies that recognize different epitopes on the same target. *Biosensors* 2, 43–56.
- Gobbi M et al. (2010). Lipid-based nanoparticles with high binding affinity for amyloid-beta1-42 peptide. *Biomaterials* 31, 6519–6529.
- Goldin N et al. (2008). Methyl jasmonate binds to and detaches mitochondria-bound hexokinase. *Oncogene* 27, 4636–4643.

- Goldman ER et al. (2011). Llama-derived single domain antibodies specific for Abrus agglutinin. *Toxins* 3, 1405–1419.
- Graef RR et al. (2011). Isolation of a highly thermal stable llama single domain antibody specific for Staphylococcus aureus enterotoxin B. *BMC Biotechnol* 11, 86.
- Hartmann J et al. (2012). The stalk domain and the glycosylation status of the activating natural killer cell receptor NKp30 are important for ligand binding. *J Biol Chem* 287, 31527–21539.
- Hayley A et al. (2010). Surfactant protein D interacts with 2-macroglobulin and increases its innate immune potential. *J Biol Chem* 285, 13461–13470.
- Hearty S et al. (2010). Surface plasmon resonance for vaccine design and efficacy studies: recent applications and future trends. *Expert Rev Vaccines* 9, 645–664.
- Hosse RJ et al. (2009). Kinetic screening of antibody-Im7 conjugates by capture on a colicin E7 DNase domain using optical biosensors. *Anal Biochem* 385, 346–357.
- Hou JQ et al. (2011). Impact of planarity of unfused aromatic molecules on G-quadruplex binding: learning from isaindigotone derivatives. *Org Biomol Chem* 9, 6422–6436.
- Jerke U et al. (2011). Complement receptor Mac-1 Is an adaptor for NB1 (CD177)-mediated PR3-ANCA neutrophil activation. *J Biol Chem* 286, 7070–7081.
- Jiang L and Barclay AN (2010). Identification of leucocyte surface protein interactions by high-throughput screening with multivalent reagents. *Immunology* 129, 55–61.
- Kalie E et al. (2007). An interferon alpha2 mutant optimized by phage display for IFNAR1 binding confers specifically enhanced antitumor activities. *J Biol Chem* 282, 11602–11611.
- Kalie E et al. (2008). The stability of the ternary interferon-receptor complex rather than the affinity to the individual subunits dictates differential biological activities. *J Biol Chem* 283, 32925–32936.
- Katz C et al. (2008). Molecular basis of the interaction between the antiapoptotic Bcl-2 family proteins and the proapoptotic protein ASPP2. *Proc Natl Acad Sci U S A* 105, 12277–12282.
- Khurana S et al. (2010). Bacterial HA1 vaccine against pandemic H5N1 influenza: evidence of oligomerization, hemagglutination, and cross-protective immunity in ferrets. *J Virol* 85, 1246–1256.
- Khurana S et al. (2010). Antigenic fingerprinting of H5N1 avian influenza using convalescent sera and monoclonal antibodies reveals potential vaccine and diagnostic targets. *PLoS Med* 6, e1000049.
- Khurana S et al. (2010). Properly folded bacterially expressed H1N1 hemagglutinin globular head and ectodomain vaccines protect ferrets against H1N1 pandemic influenza virus. *PLoS One* 5, e11548.
- Khurana S et al. (2010). Vaccines with MF59 adjuvant expand the antibody repertoire to target protective sites of pandemic avian H5N1 influenza virus. *Sci Transl Med* 2, 15ra5.
- Koch AW et al. (2011). Robo4 maintains vessel integrity and inhibits angiogenesis by interacting with UNC5B. *Dev Cell* 20, 33–46.
- Kodoyianni V (2011). Label-free analysis of biomolecular interactions using SPR imaging. *Biotechniques* 50, 32–40.
- Kostareva O et al. (2011). Disruption of shape complementarity in the ribosomal protein L1-RNA contact region does not hinder specific recognition of the RNA target site. *J Mol Recognit* 24, 524–532.
- Krishnamoorthy G et al. (2009). Integrated electrokinetic sample focusing and surface plasmon resonance imaging system for measuring biomolecular interactions. *Anal Chem* 81, 1957–1963.
- Lautner G et al. (2010). Aptamer-based biochips for label-free detection of plant virus coat proteins by SPR imaging. *Analyst* 135, 918–926.
- LeMaire-Adkins R (2007). One-shot deal. *Drug Discov Dev* 10, G6–G7.
- Lewis AE et al. (2011). Identification of nuclear phosphatidylinositol 4,5-bisphosphate-interacting proteins by neomycin extraction. *Mol Cell Proteomics* 10, M110.003376.
- Leysath CE et al. (2011). Mouse monoclonal antibodies to anthrax edema factor protect against infection. *Infect Immun* 79, 4609–4616.
- Liarzi O et al. (2010). Acetylation represses the binding of CheY to its target proteins. *Mol Microbiol* 76, 932–943.
- Lu J et al. (2009). Functional characterization of a promoter polymorphism in APE1/Ref-1 that contributes to reduced lung cancer susceptibility. *FASEB J* 23, 3459–3469.
- Mao H et al. (2011). Spatially addressed combinatorial protein libraries for recombinant antibody discovery and optimization. *Nat Biotechnol* 28, 1195–1202.
- Marom M et al. (2011). Direct interaction of mitochondrial targeting presequences with purified components of the TIM23 protein complex. *J Biol Chem* 286, 43809–43815.
- Martchenko M et al. (2010). Heterodimeric integrin complexes containing β 1-integrin promote internalization and lethality of anthrax toxin. *Proc Natl Acad Sci U S A* 107, 15583–15588.
- Martin-Killias P et al. (2011). A novel fusion toxin derived from an EpCAM-specific designed ankyrin repeat protein has potent antitumor activity. *Clin Cancer Res* 17, 100–110.

- Mester B et al. (2009). HIV-1 peptide vaccine candidates: selecting constrained V3 peptides with highest affinity to antibody 447-52D. *Biochemistry* 48, 7867–7877.
- Miller MT et al. (2011). The crystal structure of the α -neurexin-1 extracellular region reveals a hinge point for mediating synaptic adhesion and function. *Structure* 19, 767–778.
- Nahshol O et al. (2008). Parallel kinetic analysis and affinity determination of hundreds of monoclonal antibodies using the ProteOn XPR36. *Anal Biochem* 383, 52–60.
- Pan M et al. (2008). Mutation of the IFNAR-1 receptor binding site of human IFN- α 2 generates type I IFN competitive antagonists. *Biochemistry* 47, 12018–12027.
- Pedersen MW et al. (2010). Sym004: a novel synergistic anti-epidermal growth factor receptor antibody mixture with superior anticancer efficacy. *Cancer Res* 70, 588–597.
- Pellicci DG et al. (2009). Differential recognition of CD1d- α -galactosyl ceramide by the V beta 8.2 and V beta 7 semi-invariant NKT T cell receptors. *Immunity* 31, 47–59.
- Pellicci DG et al. (2011). V β 2 natural killer T cell antigen receptor-mediated recognition of CD1d-glycolipid antigen. *Proc Natl Acad Sci U S A* 108, 19007–19012.
- Phillip Y et al. (2012). Protein-binding dynamics imaged in a living cell. *Proc Natl Acad Sci U S A* 109, 1461–1466.
- Podoly E et al. (2009). The butyrylcholinesterase K variant confers structurally derived risks for Alzheimer pathology. *J Biol Chem* 284, 17170–17179.
- Potapov V et al. (2008). Computational redesign of a protein-protein interface for high affinity and binding specificity using modular architecture and naturally occurring template fragments. *J Mol Biol* 384, 109–119.
- Provenza G et al. (2010). Functional analysis of a murine monoclonal antibody against the repetitive region of the fibronectin-binding adhesins fibronectin-binding protein A and fibronectin-binding protein B from *Staphylococcus aureus*. *FEBS J* 277, 4490–4505.
- Reichel A et al. (2007). Noncovalent, site-specific biotinylation of histidine-tagged proteins. *Anal Chem* 79, 8590–8600.
- Reichmann D et al. (2005). The modular architecture of protein-protein binding interfaces. *Proc Natl Acad Sci U S A* 102, 57–62.
- Reichmann D et al. (2007). Binding hot spots in the TEM1-BLIP interface in light of its modular architecture. *J Mol Biol* 365, 663–679.
- Reichmann D et al. (2008). On the contribution of water-mediated interactions to protein-complex stability. *Biochemistry* 47, 1051–1060.
- Reichmann D et al. (2012). Order out of disorder: working cycle of an intrinsically unfolded chaperone. *Cell* 148, 947–957.
- Rich RL and Myszka DG (2007). Higher-throughput, label-free, real-time molecular interaction analysis. *Anal Biochem* 361, 1–6.
- Rich RL and Myszka DG (2007). Survey of the year 2006 commercial optical biosensor literature. *J Mol Recognit* 20, 300–366.
- Rich RL and Myszka DG (2008). Survey of the year 2007 commercial optical biosensor literature. *J Mol Recognit* 21, 355–400.
- Rich RL and Myszka DG (2010). Grading the commercial optical biosensor literature — class of 2008: 'The Mighty Binders'. *J Mol Recognit* 23, 1–64.
- Robert R et al. (2010). Restricted V gene usage and VH/VL pairing of mouse humoral response against the N-terminal immunodominant epitope of the amyloid β peptide. *Mol Immunol* 48, 59–72.
- Robert R et al. (2010). Germline humanization of a murine Abeta antibody and crystal structure of the humanized recombinant Fab fragment. *Protein Sci* 19, 299–308.
- Rodriguez HM et al. (2010). Modulation of lysyl oxidase-like 2 enzymatic activity by an allosteric antibody inhibitor. *J Biol Chem* 285, 20964–20974.
- Roell MK et al. (2010). Kinetic approach to pathway attenuation using XOMA 052, a regulatory therapeutic antibody that modulates interleukin-1 β activity. *J Biol Chem* 285, 20607–20614.
- Rosenzweig R et al. (2012). Rpn1 and Rpn2 coordinate ubiquitin processing factors at the proteasome. *J Biol Chem* 287, 14659–14671.
- Rucker J et al. (2010). Measuring membrane protein interactions using optical biosensors. *Methods Mol Biol* 617, 445–456.
- Sarraf NS et al. (2010). Structural basis of the regulation of the CbpA co-chaperone by its specific modulator CbpM. *J Mol Biol* 398, 111–121.
- Scarano S et al. (2010). Surface plasmon resonance imaging for affinity-based biosensors. *Biosens Bioelectron* 25, 957–966.
- Schiraldi M et al. (2012). HMGB1 promotes recruitment of inflammatory cells to damaged tissues by forming a complex with CXCL12 and signaling via CXCR4. *J Exp Med* 209, 551–563.
- Scholefield G et al. (2011). Spo0J regulates the oligomeric state of Soj to trigger its switch from an activator to an inhibitor of DNA replication initiation. *Mol Microbiol* 79, 1089–1100.
- Shenhar-Tsarfaty S et al. (2011). Butyrylcholinesterase interactions with amylin may protect pancreatic cells in metabolic syndrome. *J Cell Mol Med* 15, 1747–1756.

- Shepard W et al. (2011). Insights into the Rrf2 repressor family — the structure of CymR, the global cysteine regulator of *Bacillus subtilis*. *FEBS J* 278, 2689–2701.
- Slutzki M et al. (2006). Variations in the unstructured C-terminal tail of interferons contribute to differential receptor binding and biological activity. *J Mol Biol* 360, 1019–1030.
- Stadtmueller BM et al. (2010). Structural models for interactions between the 20S proteasome and its PAN/19S activators. *J Biol Chem* 285, 13–17.
- Sun B et al. (2008). Molecular basis of the interaction of *Saccharomyces cerevisiae* Eaf3 chromo domain with methylated H3K36. *J Biol Chem* 283, 36504–36512.
- Swain MD et al. (2010). Llama-derived single-domain antibodies for the detection of botulinum A neurotoxin. *Anal Bioanal Chem* 398, 339–348.
- Swain MD et al. (2011). Immunodiagnostic reagents using llama single domain antibody-alkaline phosphatase fusion proteins. *Anal Biochem* 417, 188–194.
- Taylor M et al. (2010). Development of a proteolytically stable retro-inverso peptide inhibitor of beta-amyloid oligomerization as a potential novel treatment for Alzheimer's disease. *Biochemistry* 49, 3261–3272.
- Tenhumberg S et al. (2008). Structure-guided optimization of the interleukin-6 trans-signaling antagonist sgp130. *J Biol Chem* 283, 27200–27207.
- Thomas C et al. (2011). Structural linkage between ligand discrimination and receptor activation by type I interferons. *Cell* 146, 621–632.
- Tong LJ et al. (2011). Establishment of platform for screening insulin-like growth factor-1 receptor inhibitors and evaluation of novel inhibitors. *Acta Pharmacol Sin* 32, 930–938.
- Trinh DV et al. (2008). The nuclear I kappaB protein I kappaB zeta specifically binds NF-kappaB p50 homodimers and forms a ternary complex on kappaB DNA. *J Mol Biol* 379, 122–135.
- Tsai HP et al. (2010). Immobilizing topoisomerase I on a surface plasmon resonance biosensor chip to screen for inhibitors. *J Biomed Sci* 17, 49.
- Tubbs JL et al. (2009). Flipping of alkylated DNA damage bridges base and nucleotide excision repair. *Nature* 459, 808–813.
- Uldrich AP et al. (2011). A semi-invariant V α 10+ T cell antigen receptor defines a population of natural killer T cells with distinct glycolipid antigen-recognition properties. *Nat Immunol* 12, 616–623.
- Vedadi M et al. (2011). A chemical probe selectively inhibits G9a and GLP methyltransferase activity in cells. *Nat Chem Biol* 7, 566–574.
- Venkatraman Girija U et al. (2010). Engineering novel complement activity into a pulmonary surfactant protein. *J Biol Chem* 285, 10546–10552.
- Verma B et al. (2010). Direct discovery and validation of a peptide/MHC epitope expressed in primary human breast cancer cells using a TCRm monoclonal antibody with profound antitumor properties. *Cancer Immunol Immunother* 59, 563–573.
- Walper SA et al. (2012). Rugged single domain antibody detection elements for *Bacillus anthracis* spores and vegetative cells. *PLoS One* 7, e32801.
- Wang XD et al. (2010). Turning off transcription of the bcl-2 gene by stabilizing the bcl-2 promoter quadruplex with quindoline derivatives. *J Med Chem* 53, 4390–4398.
- Wojciaka JM et al. (2009). The crystal structure of sphingosine-1-phosphate in complex with a Fab fragment reveals metal bridging of an antibody and its antigen. *Proc Natl Acad Sci U S A* 106, 17717–17722.
- Wun KS et al. (2011). A molecular basis for the exquisite CD1d-restricted antigen specificity and functional responses of natural killer T cells. *Immunity* 34, 327–339.
- Wu WB et al. (2011). Disubstituted 2-phenyl-benzopyranopyrimidine derivatives as a new type of highly selective ligands for telomeric G-quadruplex DNA. *Org Biomol Chem* 9, 2975–2986.
- Xin F et al. (2008). Molecular identification and characterization of peptide: N-glycanase from *Schizosaccharomyces pombe*. *Biochem Biophys Res Commun* 368, 907–912.
- Yosef E et al. (2009). Computational design of calmodulin mutants with up to 900-fold increase in binding specificity. *J Mol Biol* 385, 1470–1480.
- Yousef M (2007). Advances in rapid monoclonal antibody screening. *Am Biotechnol Lab* 25, 26–28.
- Yu Y et al. (2010). Direct DNA methylation profiling using methyl binding domain proteins. *Anal Chem* 82, 5012–5019.
- Yuk JS and Ha KS (2009). Array-based spectral SPR biosensor: analysis of mumps virus infection. *Methods Mol Biol* 503, 37–47.
- Zhang D et al. (2009). Together, Rpn10 and Dsk2 can serve as a polyubiquitin chain-length sensor. *Mol Cell* 36, 1018–1033.
- Zhang F et al. (2009). VEGF-B is dispensable for blood vessel growth but critical for their survival, and VEGF-B targeting inhibits pathological angiogenesis. *Proc Natl Acad Sci U S A* 106, 6152–6157.
- Zhang S et al. (2010). A variant in the CHEK2 promoter at a methylation site relieves transcriptional repression and confers reduced risk of lung cancer. *Carcinogenesis* 31, 1251–1258.

Zhang Z et al. (2011). MT119, a new planar-structured compound, targets the colchicine site of tubulin arresting mitosis and inhibiting tumor cell proliferation. *Int J Cancer* 129, 214–224.

Zheng XH et al. (2012). Platinum squares with high selectivity and affinity for human telomeric G-quadruplexes. *Chem Commun* 48, 7607–7609.

Editorial Articles

Blow N (2009). Proteins and proteomics: life on the surface. *Nature Methods* 6, 389–393.

Perkel JM (2009). Who needs labels? Macromolecular interaction sans labels. *Science* 325, 1561–1565.

Trade Journal Publications

Morrow KJ (2010). Multiplexing advances redefine HTS. www.genengnews.com/gen-articles/multiplexing-advances-redefine-hts/3302/, accessed October 26, 2012.

Moriarty L (2009). Protein interaction array system interview. www.selectscience.net/SelectScience-TV/Videos/&showID=&video_type=&videoID=207&classl=0#video, accessed October 26, 2012.

Moriarty L (2009). Multiplexed SPR accelerates protein interaction studies. www.biosciencetechnology.com/Application-Notes/2009/04/Multiplexed-SPR-Accelerates-Protein-Interaction-Studies/, accessed October 26, 2012.

Swinderman A (2009). An affinity for membrane proteins. www.drugdiscoverynews.com/index.php?newsarticle=2814, accessed October 26, 2012.

Bio-Rad BioRadiations Publications

Bartholdi M (2006). Analyzing protein interactions with the ProteOn XPR36 protein interaction array system. *BioRadiations* 119, 16–21.

Bio-Rad Laboratories (2008). ProteOn XPR36 protein interaction array system: regulatory tools for drug development. *BioRadiations* 125, 9.

Bio-Rad Laboratories (2009). Accelerating the study of fibrillogenic peptides. *BioRadiations* 129, 30–31.

Bronner V et al. (2006). Analysis of multiple protein-protein interactions using the ProteOn XPR36 protein interaction array system. *BioRadiations* 119, 22–24.

Bronner V et al. (2006). Rapid and detailed analysis of multiple antigen-antibody pairs using the ProteOn XPR36 protein interaction array system. *BioRadiations* 119, 25–27.

Bronner V et al. (2009). Rapid assay development and optimization for small molecule drug discovery. *BioRadiations* 127, 30–32.

Bronner V et al. (2012). Highly efficient lipoparticle capture and SPR binding kinetics of a membrane protein using the ProteOn XPR36 protein interaction array system. www.bioradiations.com/focus-on-applications/48-protein-interaction-analysis/1320-xpr36, accessed October 26, 2012.

Esch T et al. (2007). Accelerating research and discovery with the ProteOn XPR36 protein interaction array system. *BioRadiations* 122, 16–21.

Gette B et al. (2009). Removing obstacles to discovery — a more than 55 year tradition. *BioRadiations* 128, 16–21.

Luo R et al. (2012). Analyzing binding kinetics with surface plasmon resonance complemented with direct mass spectrometry on the same sensor chip. www.bioradiations.com/index.php?option=com_content&id=1371&Itemid, accessed October 26, 2012.

Miller S (2011). One array, 36 unique protein interactions. www.bioradiations.com/focus-on-applications/48-protein-interaction-analysis/73-proteon, accessed October 26, 2012.

Shezifi D et al. (2012). Ligand immobilization in protein interaction studies — an unattended amine coupling protocol with automatic coinjection activation. www.bioradiations.com/focus-on-applications/48-protein-interaction-analysis/1353-ligand-immobilization-in-protein-interaction-studies-an-unattended-amine-coupling-protocol-with-automatic-coinjection-activation, accessed October 26, 2012.

Shlomit C et al. (2007). Applications of the ProteOn NLC sensor chip: antibody-antigen, DNA-protein, and protein-protein interactions. *BioRadiations* 122, 22–24.

Stephen AG et al. (2009). Determining the binding kinetics of HIV-1 nucleocapsid protein to six densities of oligonucleotide using the ProteOn XPR36 protein interaction array system. *BioRadiations* 128, 24–25.

Turner B et al. (2008). Applications of the ProteOn GLH sensor chip: interactions between proteins and small molecules. *BioRadiations* 124, 28–31.



BIO-RAD

**Bio-Rad
Laboratories, Inc.**

Life Science
Group

Web site www.bio-rad.com **USA** 800 424 6723 **Australia** 61 2 9914 2800 **Austria** 01 877 89 01 **Belgium** 09 385 55 11 **Brazil** 55 11 5044 5699
Canada 905 364 3435 **China** 86 21 6169 8500 **Czech Republic** 420 241 430 532 **Denmark** 44 52 10 00 **Finland** 09 804 22 00
France 01 47 95 69 65 **Germany** 089 31 884 0 **Greece** 30 210 9532 220 **Hong Kong** 852 2789 3300 **Hungary** 36 1 459 6100 **India** 91 124 4029300
Israel 03 963 6050 **Italy** 39 02 216091 **Japan** 03 6361 7000 **Korea** 82 2 3473 4460 **Mexico** 52 555 488 7670 **The Netherlands** 0318 540666
New Zealand 64 9 415 2280 **Norway** 23 38 41 30 **Poland** 48 22 331 99 99 **Portugal** 351 21 472 7700 **Russia** 7 495 721 14 04
Singapore 65 6415 3188 **South Africa** 27 861 246 723 **Spain** 34 91 590 5200 **Sweden** 08 555 12700 **Switzerland** 061 717 95 55
Taiwan 886 2 2578 7189 **Thailand** 800 88 22 88 **United Kingdom** 020 8328 2000