

Publications

1. Wecksler A, Lundin V, Williams A, **Veeravalli K**, Reilly D, Grieco SH (2023). Bioprocess Development for Generating 13 C-Labeled Antibody in *Escherichia coli*. *Antibodies* 12(1): 16
2. Baginski T, **Veeravalli K**, Williams C, McKenna R (2022). Enzymatic Basis of the Selective Intra-Chain Disulfide Reduction and Free Thiol Formation in the Fc CH2 Domain of the Recombinant Monovalent Monoclonal Antibody Manufactured in the *Escherichia coli*. *Microbial Cell Factories* 21: 167
3. McKenna R, Lombana TN., and **Veeravalli K** (2019). Engineered Sigma Factors Increase Full-Length Antibody Expression in *Escherichia coli*. *Metabolic Engineering* 52: 315-323
4. **Veeravalli K**, Schindler T, Dong E, Yamada M, Hamilton R, and Laird MW. (2017) Strain Engineering to Reduce Acetate Accumulation During Microaerobic Growth Conditions in *Escherichia coli*. *Biotechnology Progress* doi: 10.1002/btpr.2592. [Epub ahead of print]
5. Vanderlaan M, Sandoval W, Liu P, Nishihara J, Tsui G, Lin M, Guanawan F, Parker S, Wong RM, Low J, Wang X, Yang J, **Veeravalli K**, McKay P, Yu C, O'Connell L, Tran B, Vij R, Fong C, Francissen K, Shimoni JZ, Quarmby V, and Krawitz D. (2015) A Host-Cell Protein Impurity in Therapeutic Monoclonal Antibodies Derived from Chinese Hamster Ovary Cells. *BioProcess International* 13(4): 18-29
6. **Veeravalli K** and Laird MW. (2015) Toward an Era of Utilizing Methionine Overproducing Hosts for Recombinant Protein Production in *Escherichia coli*. *Bioengineered* 6 (3): 132-135.
7. **Veeravalli K**, Fedesco M, Zhang Y, Yu C, and Laird MW. (2015) Strain Engineering to Prevent Norleucine Misincorporation during Recombinant Protein Production in *Escherichia coli*. *Biotechnology Progress* 31 (1): 204-211
8. Gao X, Ji A, **Veeravalli K**, Zhang T, McGreevy W, Wang J, Zheng K, Stracke JO, Kelley RF, Laird MW, Liu J, and Cromwell, MEM. (2015) Effect of Individual Fc Methionine Oxidation in IgG on FcRn Binding: Met252 Oxidation Impairs FcRn Binding More Profoundly than Met428 Oxidation. *Journal of Pharmaceutical Sciences*, 104 (2): 368-377.
9. Feeney M, **Veeravalli K**, Faulkner M, Gon S, Georgiou G, and Beckwith J. (2011) Repurposing Lipoic Acid Changes Electron Flow in Two Important Metabolic Pathways of *Escherichia coli*. *Proceedings of the National Academy of Sciences*, 108 (19): 7991-7996.
10. **Veeravalli K**, Boyd D, Iverson B, Beckwith J, and Georgiou G. (2011) Laboratory Evolution of Glutathione Biosynthesis Reveals Natural Compensatory Pathways. *Nature Chemical Biology* 7 (2): 101-105.
11. Faulkner MJ, **Veeravalli K**, Gon S, Georgiou G, and Beckwith J. (2008) Functional Plasticity of a Peroxidase Allows Evolution of Diverse Disulfide-Reducing Pathways. *Proceedings of the National Academy of Sciences* 105 (18): 6735-6740.
12. Masip L, **Veeravalli K**, and Georgiou G. (2006) The Many Faces of Glutathione in Bacteria. *Antioxid. Redox Signal* 8 (5-6): 753-762.

Patents (3 issued, 2 pending)

1. McKenna R, Veeravalli K. Methods of producing two chain proteins in prokaryotic host cells. Publication # 2021/0261973 A1. Filed: May 4, 2021.
2. Lombana TN, McKenna R, Spiess C, Veeravalli K, Dillon M. Methods of Identifying Bacteria Comprising Binding Polypeptides. Publication # 20180030434. Filed: October 12, 2017
3. Veeravalli K, Laird MW. Microorganisms comprising a mutant metA allele for reducing norleucine misincorporation into proteins, Patent # 11015214. May 25, 2021
4. Veeravalli K, Laird MW. Methods for reducing norleucine misincorporation into proteins using a microorganism comprising a mutant metA allele. Patent # 10421984. September 24, 2019
5. Veeravalli K, Laird MW. Compositions for preventing norleucine misincorporation into proteins. Patent # 10179925. January 15, 2019