Mass spectrometry

MS-based protein footprinting publications

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High structural resolution hydroxyl radical protein footprinting reveals an extended Robo1-heparin binding interface

Zixuan Li, Heather Moniz, Shuo Wang, Annapoorani Ramiah, Fuming Zhang, Kelley W. Moremen, Robert J. Linhardt, and Joshua S. Sharp

J Biol Chem. 2015 Apr 24;290(17):10729-40

https://www.sciencedirect.com/science/article/pii/S0021925820426055

Exposure of solvent-inaccessible regions in the amyloidogenic protein human SOD1 determined by hydroxyl radical footprinting

Yuewei Sheng, Joseph Capri, Alan Waring, Joan Selverstone Valentine, and Julian Whitelegges

J Am Soc Mass Spectrom. 2019 Feb;30(2):218-226

https://pubs.acs.org/doi/10.1007/s13361-018-2075-y

Fast photochemical oxidation of proteins (FPOP) maps the epitope of EGFR binding to adnectin

Yuetian Yan, Guodong Chen, Hui Wei, Richard Y.-C. Huang, Jingjie Mo, Don L. Rempel, Adrienne A. Tymiak, and Michael L. Gross

J Am Soc Mass Spectrom. 2014 Dec;25(12):2084-92

https://pubs.acs.org/doi/10.1007/s13361-014-0993-x

Structural analysis of the glycosylated intact HIV-1 gp120–b12 antibody complex using Hydroxyl radical protein footprinting

Xiaoyan Li, Oliver C. Grant, Keigo Ito, Aaron Wallace, Shixia Wang, Peng Zhao, Lance Wells, Shan Lu, Robert J. Woods, and Joshua S. Sharp

Biochemistry. 2017 Feb 21;56(7):957-970

https://pubs.acs.org/doi/10.1021/acs.biochem.6b00888

A dynamic model of pH-induced protein G′e higher order structure changes derived from mass spectrometric analyses

Yelena Yefremova, Mahmoud Al-Majdoub, Kwabena F.M. Opuni, Cornelia Koy, Yuetian Yan, Michael L. Gross, and Michael O. Glocker

Anal Chem. 2016 Jan 5;88(1):890-7

https://pubs.acs.org/doi/10.1021/acs.analchem.5b03536

Complementary MS methods assist conformational characterization of antibodies with altered S–S bonding networks

Lisa M. Jones, Hao Zhang, Weidong Cui, Sandeep Kumar, Justin B. Sperry, James A. Carroll, and Michael L. Gross

J Am Soc Mass Spectrom. 2013 Jun;24(6):835-45

https://pubs.acs.org/doi/10.1007/s13361-013-0582-4

Fast photochemical oxidation of proteins for epitope mapping

Lisa M. Jones, Justin B. Sperry, James A. Carroll, and Michael L. Gross

Anal Chem. 2011 Oct 15;83(20):7657-61

https://pubs.acs.org/doi/10.1021/ac2007366

Probing the paramyxovirus fusion (F) protein-refolding event from pre- to postfusion by oxidative footprinting

Taylor A. Poor, Lisa M. Jones, Amika Sood, George P. Leser, Manolo D. Plasencia, Don L. Rempel, Theodore S. Jardetzky, Robert J. Woods, Michael L. Gross, and Robert A. Lamb

Proc Natl Acad Sci USA. 2014 Jun 24;111(25):E2596-605

https://www.pnas.org/doi/full/10.1073/pnas.1408983111