

IgG deglycosylation analysis using MALDI-TOF

1. Add 2 μ l of CarboClip (PNGase F) to 100 μ l of IgG (10 μ g/ μ l) diluted in nanoPure H₂O.
2. Incubate at 60 °C for 2h, agitating at 300 rpm.

Next steps are used to remove the remaining buffer from the PNGase F that interferes with the MALDI.

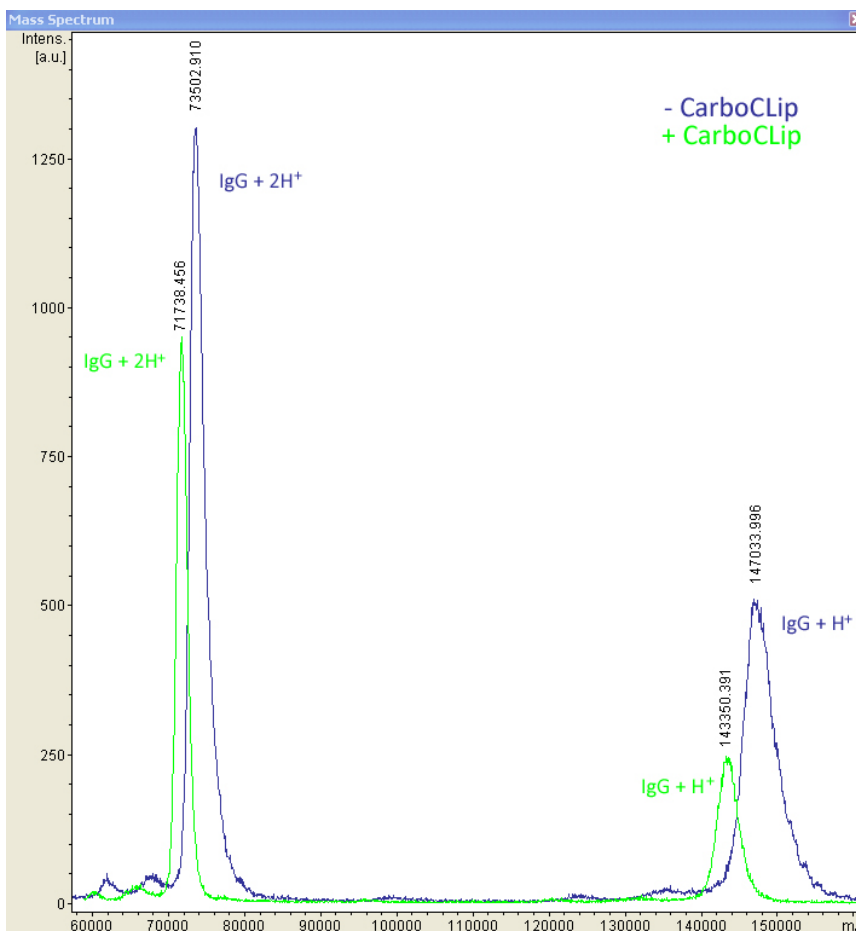
3. Add the 102 μ l to a 30 kDa amicon device and add 350 μ l more of nanoPure H₂O. Centrifuge at 10,000 x g for 5 min at RT. Remove filtered sample.
4. Add again another 400 μ l more of nanoPure H₂O. Centrif. at 10,000 x g for 5 min at RT. Remove filtered sample (repeat this step twice).
5. Invert the amicon device and recover sample by centrifugation at 1,000 x g for 3 min at RT. Recover concentrated IgG.

MALDI-TOF sample preparation and analysis

6. Add 1 μ l of concentrated IgG to the polished steel MALDI-TOF plate, and add 1 μ l of SuperDHB (diluted in ACN at 20 μ g/ μ l). Dry under vacuum or at RT.

Flex control-ultraflex tof-tof software

7. Method: LP_30-210_KDa.par.
8. Set laser Attenuator "3_medium".
9. Mass range 68,000 – 170,000.
10. Laser intensity 90-100%



Accumulated Spectra of IgG before (Blue) and after adding CarboClip (Green) is shown. Single charged and double charged IgG are shown