## Literature Reference

## LR2022021043

Titer measurement of HIV-1 envelope trimeric glycoprotein in cell culture media by a new tandem ion exchange and size exclusion chromatography (IEC-SEC) method.

Trimer separation from the rest of the cell/HCP was achieved via WAX-SEC tandem chromatography

| Column                           | SRT SEC-300, 5um, 300 A 7.8 x 150mm<br>Part Number: <u>215300-7815</u>  |           | 1.8E4                     | a<br>  |
|----------------------------------|---|-----------|---------------------------|--|
| Mobile<br>Phase                  | MPA: 250 mM sodium phosphate (pH 6.0)<br>MPB:1 M sodium chloride (NaCl) |           | 9.0E3                     |  |
| Injection                        | 50uL  | sity (EU) | 1.8E4                     | b  |
| Instrument                       | UHPLC   |           | 9.0E3                     |  |
| Detection                        | FLD - 277 nm and 344 nm   | e Inten   | 0.0                       |  |
| Length of<br>Sample              | ~2500-3000 nucleotides  | oreso     | DE3- C                    |  |
| Molecular<br>Weight of<br>Sample | 350kDa  | Flu       | B 1.5E3<br>0.0<br>3.0E3 d |  |
| Sample<br>Prep                   | Filtered 0.2um cellulose acetate  | 1.5E3-    |                           |  |
|                                  |   |           | 0.0                       |  |
|                                  |   |           |                           | 2 4 6 8 10 12 14 16 18<br>Retention Time (min) |

Fig. 2. Representative IEC-SEC chromatograms of (a) 2× PBS; (b) CHO-DG44 mock media (negative control); (c) HIV Env trimer spiked into 2× PBS (positive control, final: 100 µg/mL); (d) HIV Env trimer spiked into CHO-DG44 mock cell culture media (final: 100 µg/mL).



National Institute of Health (NIH)

Yang, Gengcheng, et al. "Titer measurement of HIV-1 envelope trimeric glycoprotein in cell culture media by a new tandem ion exchange and size exclusion chromatography (IEC-SEC) method." Vaccine 37.24 (2019): 3142-3145.

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