**Online Data for: Epitope mapping and characterization of 4-hydroxy-2-nonenal modified-human serum albumin using two different polyclonal antibodies**

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1. **Confirmation of HNE adducts on HSA by LC-MS/MS**

LC-MS/MS data are provided in the 7zip archive folder **Pinto 2019 HNE-HSA MS FILES**

HNE-modified HSA samples (50 μg) were digested with trypsin according to the Filter Aided Sample Preparation (FASP) protocol as described in the article experimental section. LC-MS analysis using a nano-ACQUITY UPLC system (Waters GmbH, Eschborn, Germany) coupled online to an LTQ Orbitrap XL ETD mass spectrometer equipped with a nano-ESI source (Thermo Fischer Scientific, Bremen, Germany). The precursor ion survey scans were acquired with Orbitrap resolution of 60,000 at m/z 400 across a m/z range from 400 to 2000. CID tandem mass spectra (isolation width 2.00, activation Q 0.250, normalized collision energy 35.0%, activation time 30.0 ms) were recorded in the linear ion trap by data-dependent acquisition (DDA) for the top six most abundant ions in each survey scan with a dynamic exclusion of 60 s using Xcalibur software 3.0 (Thermo Fischer Scientific, Bremen, Germany).

HNE modifications were identified using the Sequest search engine (Proteome Discoverer 1.4, Thermo Scientific) against Homo sapiens (Human) database, allowing up to two missed cleavages and a mass tolerance of 10 ppm for precursor ions and 0.8 Da for product ions.

* O\_18\_19\_IP1 (non-modified HSA) Control
* O\_18\_19\_IP2 (HNE-treated HSA 1:1)
* O\_18\_19\_IP3 (HNE-treated HSA 1:5)
* O\_18\_19\_IP4 (HNE-treated HSA 1:10) This is the treatment concentration for which data are shown in the manuscript
1. **Screening of SA369 Bleeds, Testing enriched SA369 anti-HNE antibodies, Epitope mapping and Anti-HNE sandwich ELISA**

Data are supplied in the form of an Excel spreadsheet with multiple sheets labelled as follows:

* ELISA Screening SA369 Bleeds
* Enrichment of SA369 antibodies
* Testing enriched SA369 Abs
* Epitope mapping
* Sandwich ELISA (Anti-HNE)

The sera dilutions used in ELISAs are indicated on the individual spreadsheets.