

Folder contents:

- Input data for ML-SAScombine
- Run scripts used with ML-SAScombine
- Output files for updated consensus files from ML-SAScombine with log and linear q -binning*.
- Output files for combined SEC-SAS data from ML-SAScombine with log q -binning

Individual scattering profiles in the folders are identified by their source, with the numerical designations given in the Table below. Data collection details are in **Table S2** of the Supporting Information from the round robin study (Trehwella et al. (2022) *Acta Cryst.* **D78**: 1315)

Naming convention for *.dat files is: instrument code and protein designation followed by SS for SEC-SAXS data or concentrations for batch data mg/mL expressed as XptY. A “-Gt” extension indicates the lowest- q data have been truncated to match the lowest- q data included by AutoGNOM.

Key for instruments designations:

| SAXS Instruments | |
|---|--------------|
| Advanced Light Source - SIBYLS | X1 |
| Advanced Photon Source – 12-ID-B | X2 |
| Advanced Photon Source – BioCAT | X3 |
| Australian synchrotron SAXSWAXS: AS | X4 |
| Cornell High Energy Synchrotron Source (CHESS) – ID7a | X5 |
| Diamond Light Source - B21 | X6 |
| NIST/IBBR, SAXSLab Ganesha Instrument | X7 |
| Petra III, P12 BioSAXS (SAXS and WAXS configurations) | X8 (a and b) |
| Shanghai Synchrotron Radiation Facility – BL192U | X9 |
| SOLEIL – SWING | X10 |
| SPring-8 - BL40B2 | X11 |
| Stanford Synchrotron Radiation Laboratory (SSRL) – Beamline 4-2 BioSAXS | X12 |

* We use “ q ” for the scattering vector amplitude as $4\pi(\sin\theta)/\lambda$, consistent with the convention used in the associated publication and note that SASBDB uses “ s ” in place of “ q .”