



## Extending the scope of your research with characterisation solutions

Sydney Analytical has a suite of equipment to assist in characterisation of your protein or macromolecule of choice. We can measure secondary structure composition, assess stability, aggregation propensity, and even determine solution state of proteins or complexes at a single molecular level.

### Circular Dichroism (CD) Spectroscopy

Measure the secondary structure composition and/or temperature stability of your sample

Can be used to assess proteins, peptides or other macromolecules, including polymers and even nanoparticles

#### Applications:

Assess protein fold and stability, measure D vs L-amino acid composition, compare secondary structure of a standard or WT vs a biosimilar or mutant(s), nanoparticle analysis



### Nanotemper Prometheus Panta

Generates simultaneous measurements of Dynamic Light Scattering (DLS), Differential Scanning Fluorimetry (DSF) and sample turbidity.

Measurements rely on intrinsic fluorescence and light scattering properties of the molecule, so no additional dyes or additives are needed

#### Applications:

Any protein stability and aggregation measurements e.g.  $T_m$ ,  $T_{agg}$ , screening buffer conditions ahead of protein crystallography, assessing stability of engineered antibody variants or therapeutic formulations

### Refeyn 2MP Mass Photometer

Provides a label-free determination of mass measurement for single protein molecules and/or complexes in solution using light.

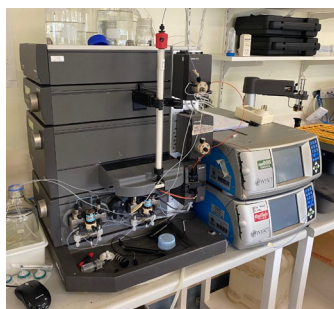
#### Can be used with:

Single Proteins (> 30 kDa)

Multi-Protein or protein:nucleic acid complexes

#### Applications:

Assess solution state of individual proteins, confirm formation of multi-protein complexes ahead of structural determination studies by crystallography or CryoEM.



### SEC MALS

Provides a shape-independent measurement of molecular weight using multi-angle light scattering (MALS) following size-exclusion chromatography (SEC)

#### Applications:

Assess solution state of individual proteins or complexes



To request more information or instrument training, please contact us:

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