**Differential Scanning Calorimetry**

**(DSC)**

**Analysis Request**

1. **Applicant Information**

|  |  |
| --- | --- |
| **Name**  |  |
| **Email** |  | **Phone** |  |
| **Supervisor** |  | **Supervisor email** |  |
| **Group/Lab** |  | **Phone Extension** |  |

1. **Assay Information**

|  |  |
| --- | --- |
| **Sample name** |  |
| **Buffer Composition** |  |
| **Concentration (mg/ml)** |  |
| **Molecular Weight** |  |
| **Temperature Interval** | From to |
| **Heating Rate (°/min)** |  |

|  |
| --- |
| **Notes:**(please fill in with information you consider relevant, e.g. abbreviations used on tube identification, sample details and requirements, etc.)  |
| **Sample requirements:** * The ideal protein concentration for a DSC assay is around **0.5 mg/ml** however sometimes you can perform the assay with less if the signal is known to be strong. To completely fill the DSC cell you need a volume of **700 µL**.
* Prior to any assay is important to collect a good background buffer scan, this is done by filling both cells with buffer and then scanning to the upper temperature limit anticipated for scans that will be collected with test samples in this buffer. For this reason, you will need around **3 ml of buffer** to perform the complete experiment.
* Most buffers are compatible with the DSC assay, with the exception of MES that can sometimes yield some disturbances in the scan. It is also recommended that divalent metals be avoided when using phosphate containing buffers. You should also be mindful that some buffers components might degrade with high temperatures and influence the results, some reducing agents might have this behavior and for that reason their concentrations should be low.

**Results will be sent exclusively by email in the .dsc format (NanoAnalyze compatible).**If you need help with result analysis please contact the technician.  |

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Submission date: Analysis date: