**Test protocol**

***Proton sensitivity in water***

Use sample 3 – sucrose in 90%H2O/10%D2O, 20°C, non-spinning

Pulse sequence: presaturation -single hard pulse - acquisition

***Acquisition parameters***

Transmitter frequency: water resonance (around 4.7 ppm, optimize)

Spectral width: 12 ppm

Number of points in FID: 32k (real)

Number of scans: 8

Number of dummy scans: 2

Presaturation time: 2 s

Presaturation power: no more than 65 Hz

Receiver gain: optimize

***Processing parameters***

Window function: none

Number of points in spectrum: 32k (real)

Phase correction: automatic or manual, adjust the sucrose resonances to pure absorption

Base line correction: yes

***Evaluation***

Evaluate signal-to-noise ratio for the anomeric proton signals (between 5.2 and 5.6 ppm), choose 2 ppm noise area from the region between 6.5 and 9 ppm. Use the formula

Where *Imax* is the maximal signal intensity and *npp* is the peak-to-peak value in the noise region.