

iGEM 2016 – SDU

Title: Qubit® Protein Assay Kits

Date issued: 2016.10.04

SOP number: SOP0038

Review date: 2016.10.11

Version number: v1

Written by: Joel Vej-Nielsen

1. Purpose

Quantification of proteins.

2. Area of application

This procedure is valid for prepared cell digests.

3. Apparatus and equipment

Apparatus/equipment	Location (Room number)	Check points	Criteria for approval/rejection
Qubit® Fluorometer			
Vortex			

4. Materials and reagents – their shelf life and risk labelling

Name	Components (Concentrations)	Manufacturer / Cat. #	Room	Safety considerations
Qubit® Reagent				
Qubit® Buffer				
Qubit® Standards				
Qubit® Assay tubes				
0,5 ml PCR tubes				

5. QC – Quality Control

6. List of other SOPs relevant to this SOP

SOP0037 - iTRAQ sample preparation

SOP0039 – C8 and C16 column purification

SOP0040 - iTRAQ labelling

SOP0041 - TiO2 purification

7. Environmental conditions required

8. Procedure

- 8.1 Set up and label PCR tubes, 1 for each sample and 3 standards.
- 8.2 Prepare Qubit® working solution by diluting the Qubit® protein reagent 1:200 in Qubit® protein buffer. (Use plastic tubes!)
- 8.3 Add 190 µl Qubit® working solution to standard tubes.
- 8.4 Add 10 µl of each Qubit® standard to the appropriate tubes.
- 8.5 Add Qubit® working solution, to individual assay tubes so as the final volume will be 200 µl after addition of sample (that can span from 1-20 µl).
- 8.6 Add samples to appropriate assay tubes and mix by pipetting up and down.
- 8.7 Vortex and incubate all tubes for 15. Min. at room temperature
- 8.8 Make measurements

9. Waste handling

Chemical name	Concentration	Type of waste (C, Z...)	Remarks

10. Time consumption

- Total-time 45 m.
- Hands-on-time 20 m.

11. Scheme of development

Date / Initials	Version No.	Description of changes
16.10.04 / JVN	01	The SOP has been written
16.10.13 / JR		The SOP has been reviewed

12. Appendixes