

Task 1

16 October 2012

Determination of oligonucleotide concentration

You have obtained envelope from your favorite supplier. The envelope contained dried primer with sequence 5'-CTCTgATggTTCACtggATC-3'.

The synthesis protocol says that the total amount of DNA is **approximately** 10 μg .

After dissolving the whole amount in 1 mL of TE buffer,

you measured exact absorbance **A** at 260 nm.

Absorbance values **A** can be found in the table next to your name.

- 1) What is the **precise** molar concentration of DNA in μM (10^{-6}M)?
- 2) How much was the light intensity reduced after going through cuvette comparing the intensity of incident light? Report the transmitted light intensity as a percentage of the incident light intensity.

For determination of oligonucleotide characteristics use calculator at

<http://eu.idtdna.com/analyzer/Applications/OligoAnalyzer/>

Please send me your short answers via email within 48 hours.

Correct answer = 0.5 point

		A
1	Bencúrová, Petra	0.340
2	Dabravolski, Sjarhei	0.360
3	Dubec, Vít	0.380
4	Dudová, Zdenka	0.400
5	Dvořák, Jan	0.420
6	Fabišik, Matej	0.440
7	Fedorko, Jan	0.460
8	Fialová, Martina	0.480
9	Holek, Michal	0.500
10	Kočka, Martin	0.520
11	Míka, Matěj	0.540
12	Obacz, Joanna Agnieszka	0.560
13	Partyka, Jan	0.580
14	Přikrylová, Terézia	0.600
15	Rájecký, Michal	0.620
16	Reichman, Pavel	0.640
17	Sochorová, Jana	0.660
18	Škubník, Karel	0.680
19	Tylichová, Zuzana	0.700