



High fidelity cDNA syntese

High fidelity cDNA synthesis

Baggrund/ Background

PCR baseret genekspressionsanalyse er afhængig af effektiv revers transkription af mRNA. Oprensning af arvemateriale fra cancer vævsbiopsier giver typisk ophav til RNA og DNA af relativt dårlig kvalitet og dermed et øget behov for optimeret cDNA syntese. PentaBase har udviklet en ny generation af primere til revers transkription der kan anvendes ved alternative settings (temperatur, enzym, etc), og det ønskes evalueret hvorvidt brugen af disse vil assistere uniform og effektiv cDNA syntese når sub-optimale RNA-oprensninger benyttes.

PCR-based gene-expression analysis relies on effective reverse transcription of mRNA. Typically, purification of genetic material from solid tumor-biopsies leads to RNA and DNA of poor quality, thus increasing the requirements for optimal cDNA synthesis. PentaBase has developed a new generation of primers for reverse transcription allowing for alternative settings (temperature, enzyme, etc) and seeks to evaluate how well these will assist effective cDNA synthesis when using sub-optimal RNA purifications.

Hvor/ Where

Projektet vil hovedsageligt foregå i PentaBases laboratorier i Odense C.

The project will mainly take place in PentaBase's laboratories in Odense C.

Varighed/ Duration

Projektet er forventet at vare 2-6 måneder.

The expected duration of the project is 2-6 months.

Teknikker der skal anvendes/ Techniques

RNA ekstraktion, cDNA syntese, real-time PCR, data-analyse

RNA extraction, cDNA synthesis, real-time PCR, data analysis