

Low-Cost Experiments in STEM Education

Heike Kusserow & Lena Hoeke | OSZ Lise Meitner | Berlin | Germany

Genome edited plants with CRISPR/Cas9

It starts with explaining the CRISPR/Cas9 method.

6 stations to explore a method

The stations focus on the following aspects: *application, regulations, mutagenesis and isolation of DNA and plant embryos.*



Why CRISPR in plants ?

Practical approach

read a worksheet and solve tasks

Experiment:

DNA isolation

write a short protocol

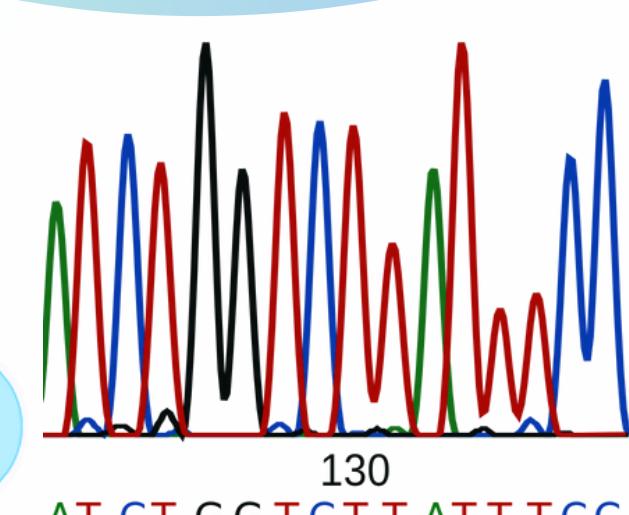
Method

Talk, video, worksheet & puzzle

CRISPR/Cas9 in plant breeding

Mutations

solve exercises on a worksheet



Law and regulations



The law behind the method

read a worksheet and solve tasks



45-90 min

1 method

90 min

+ 5 stations

estimated time needed:
135 to 180 min

This project

- combines practice and theory
- covers all technical aspects of CRISPR/Cas9
- combines digital und analogous media and practice
- contains collaborative parts
- it's fun



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Link to the material



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