

EDVOTEK

přístroje a kity pro moderní vzdělávání

Martin Kuthan



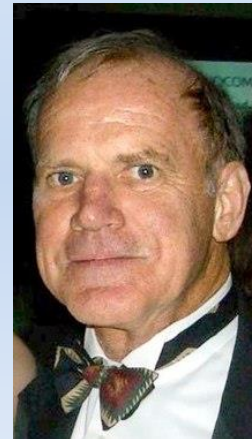
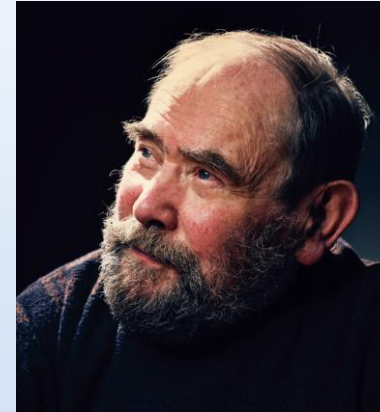
BIOCEV - PŘF UK



Věda a objevy

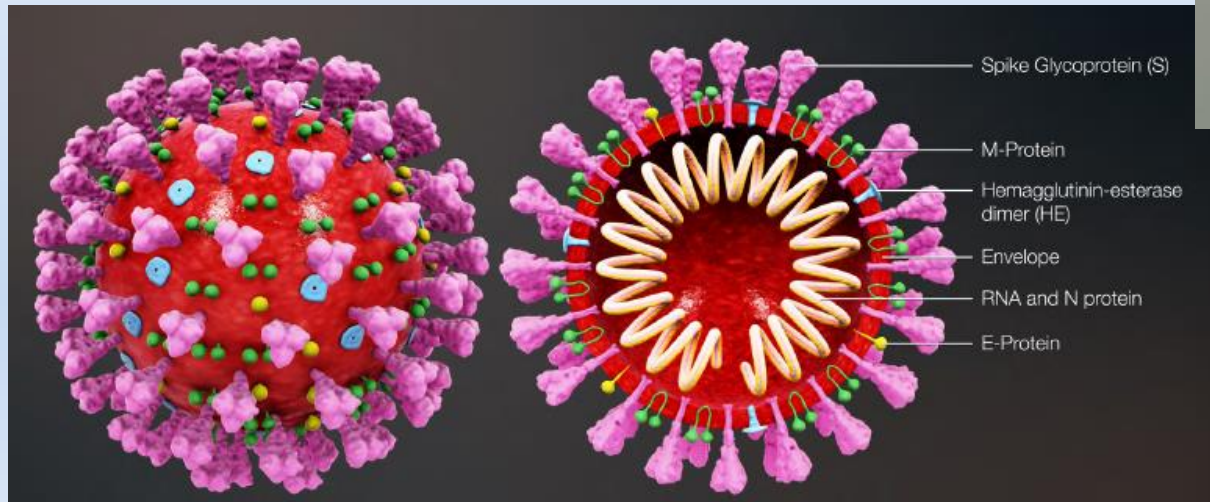
- formulování konceptu mRNA
 - Sydney Brenner – izolace mRNA, 1961 (2002 Nobelova cena za fyziologii nebo medicínu)

- in vitro klonování DNA
 - Kary Mullis – vývoj metody PCR, 1983 (1993 Nobelova cena za chemii)



Objevy a jejich využití

- pandemie Covid-19
 - mRNA vakcíny
 - RT-PCR testy na SARS-CoV-2



Výuka experimentálních oborů

- společnost EDVOTEK se již od roku 1987 věnuje vývoji produktů pro vzdělávání v oblasti Life Sciences



Our Philosophy

Teaching should always be fun
Learning should always be enjoyable

Experiments should foster learning
Preparation should always be easy


Science shouldn't be expensive
The environment shouldn't suffer

Lessons should always be relevant
Science should never be called boring

DNA is nothing to be scared of
Science is a way of life



přístroje a kity EDVOTEK pro moderní vzdělávání

	Equipment
	Discovering Electrophoresis
	Ready-to-Load™ DNA Electrophoresis
	Advanced DNA Applications
	Polymerase Chain Reaction (PCR)
	Genetic Engineering & Transformation
	Forensics
	Biomedical Sciences
	Environmental Science
	Proteins, Enzymes & Chromatography
	Introduction to Biotechnology
	Distance Learning



přístroje a kity EDVOTEK pro moderní vzdělávání

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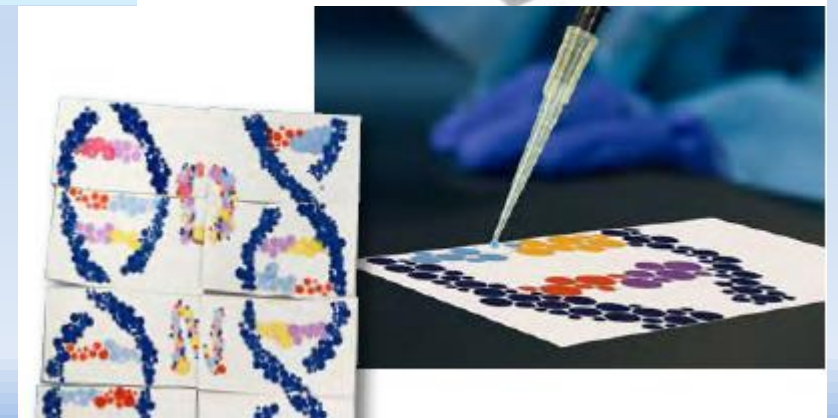
základy

Cat. #S-44


Micropipetting Basics

Cat. #S-45

Pipetting By Numbers™
STEAM Pipetting Practice



přístroje a kity EDVOTEK pro moderní vzdělávání

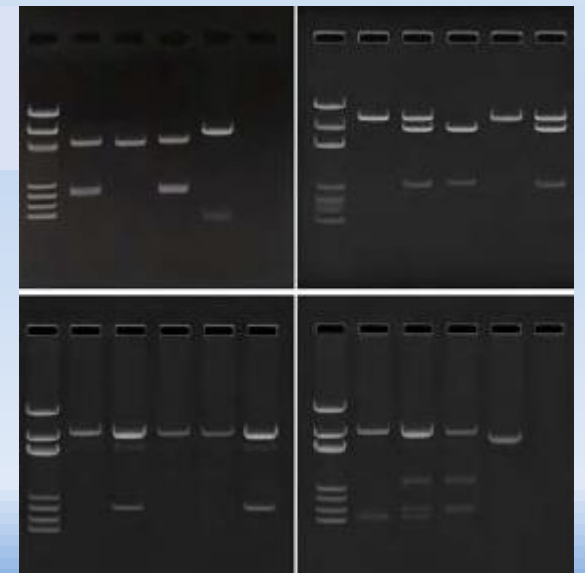
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seznámení s elektroforézou

Cat. #S-43
DNA DuraGels™



Cat. #100
MyLab™ Electrophoresis
Sampler Kit



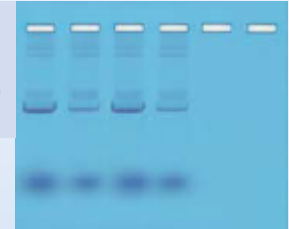
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manipulace s DNA

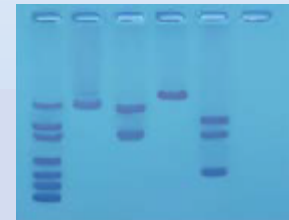
Cat. #202

Mini-Prep Isolation of Plasmid DNA



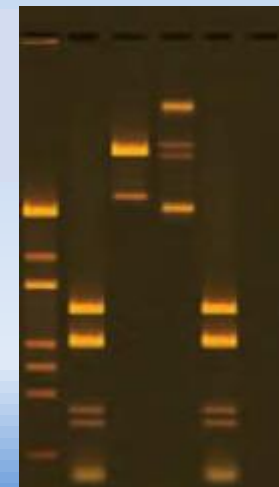
Cat. #206

Restriction Enzyme Mapping




Cat. #205

Analysis of DNA Methylation Using Restriction Enzymes



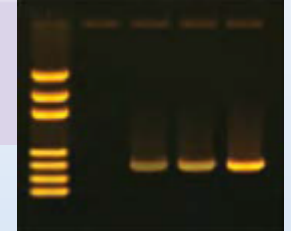
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využití PCR

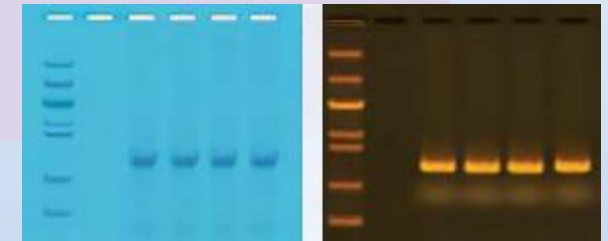
[Cat. #330](#)

PCR Amplification of DNA



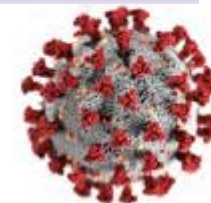
[Cat. #372](#)

Quick PCR



[Cat. #363](#)

Detecting COVID-19 Using Reverse-Transcription PCR (RT-PCR)

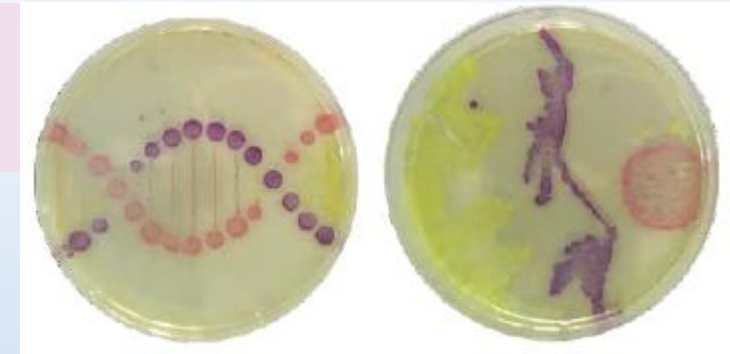


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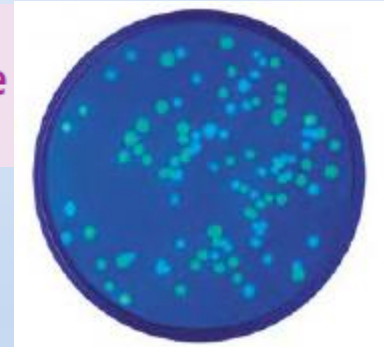
Cat. #226

Living Art: Adding STEAM to Transformations



Cat. #222

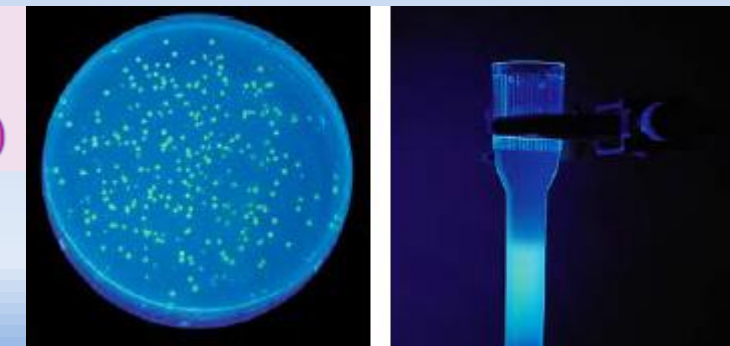
Transformation of *E.coli* with Blue and Green Fluorescent Proteins



genové manipulace

Cat. #303

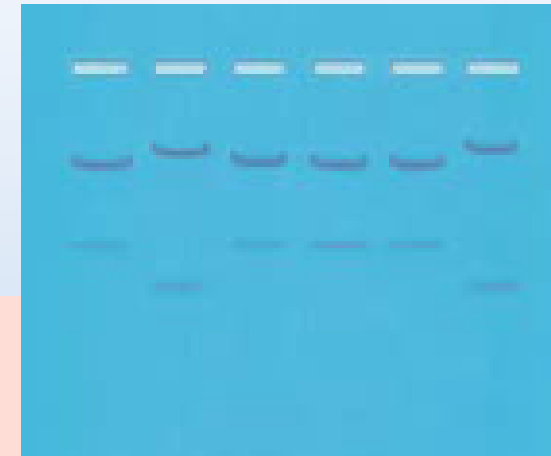
Exploring Biotechnology with Green Fluorescent Protein (GFP)



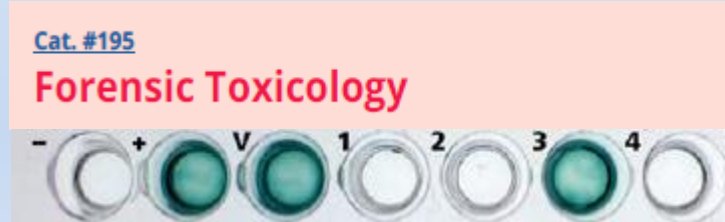
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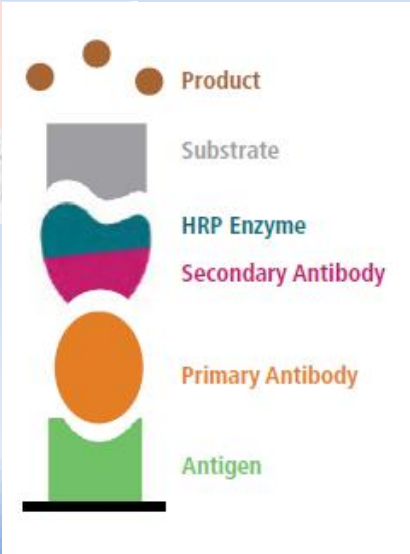
forenzní úlohy



Cat. #109
DNA Fingerprinting by Restriction Enzyme Patterns



Cat. #195
Forensic Toxicology



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biomedicína

Cat. #123

Nucleic Acid Testing for COVID-19



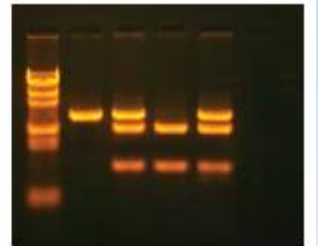
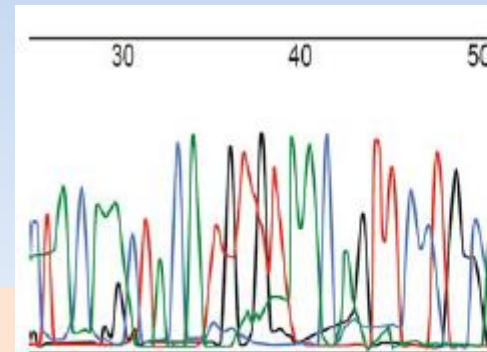
Cat. #118

Cholesterol Diagnostics



Cat. #314

In Search of the Cancer Gene

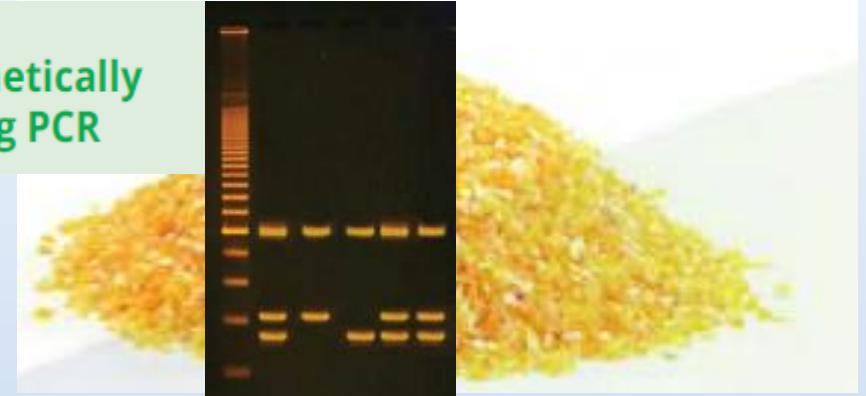


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Cat. #962

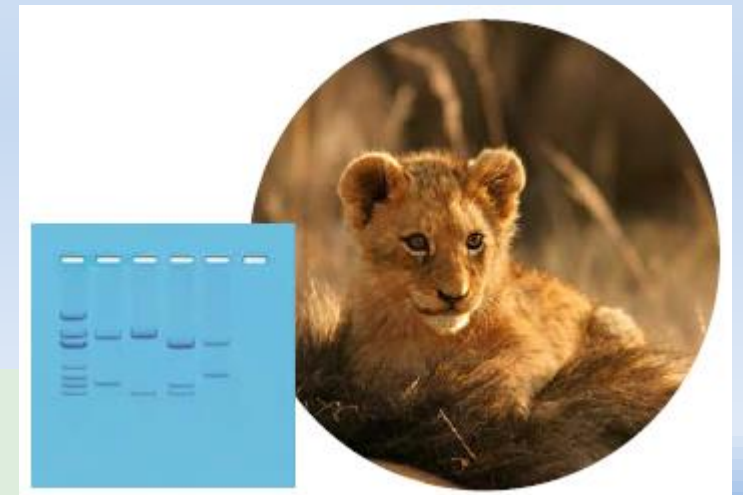
Identification of Genetically Modified Foods Using PCR



životní prostředí

Cat. #920

Safari Family Reunion



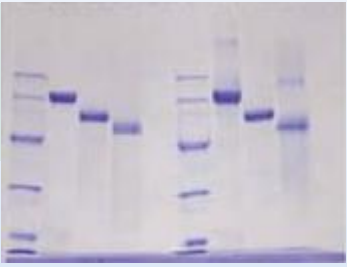
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analýza proteinů

Cat. #153
Determination of Protein Molecular Weight




Cat. #275
Simulation of HIV Detection by Western Blot (*Agarose-based*)



Cat. #253
Diversity of Fish Proteins



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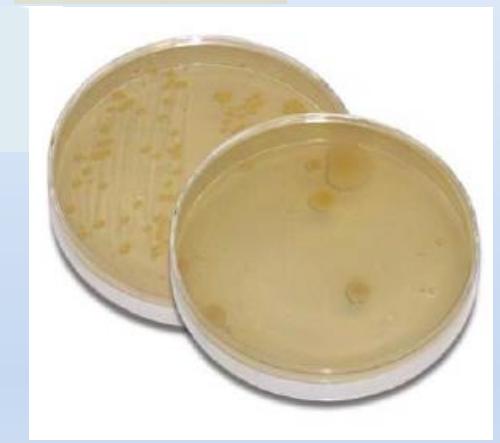
Cat. #S-47

**Linking Food Science to Biotechnology:
Unlock the Color of Candies**



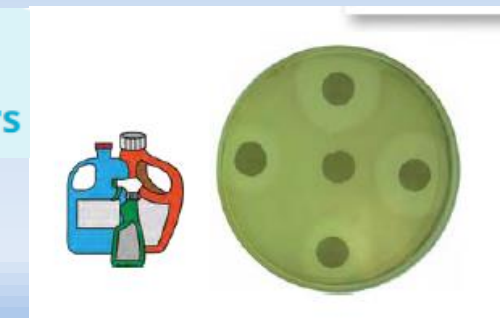
Cat. #S-30

**How Clean Is the Water We Drink
and the Air We Breathe?**



Cat. #161

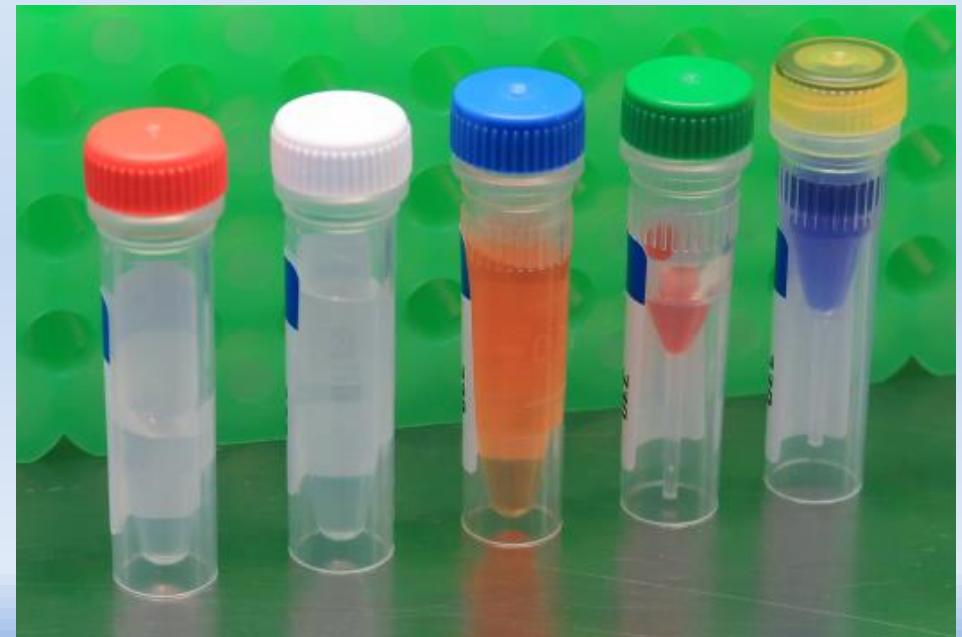
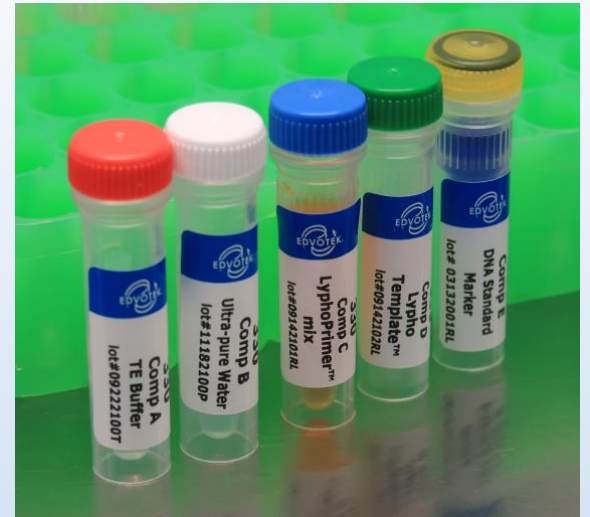
**How Clean is Clean? Testing the
Effectiveness of Antibacterial Cleaners**



biotechnologie

Jak to funguje prakticky?

- kity jsou obdobné, jako soupravy reálně používané při výzkumu:
 - veškeré chemikálie a reagentie
 - agaróza
 - elektroforetický pufr
 - mikrozkušavky
 - SYBR® Safe stain pro fluorescenční barvení DNA
 - FlashBlue™ stain pro modré barvení DNA



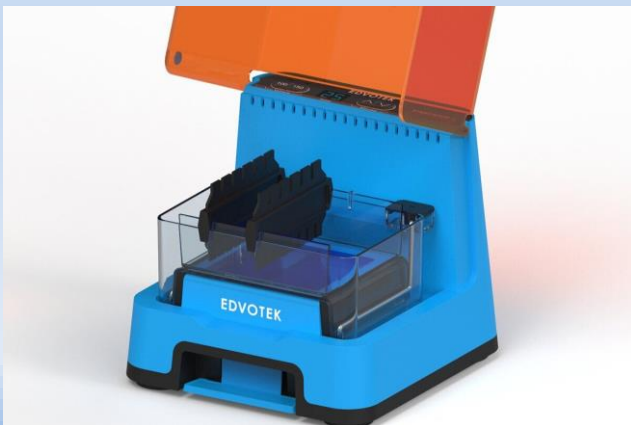
Jak to funguje prakticky?

- přístroje jsou plnohodnotné verze srovnatelné s reálnými přístroji používanými při výzkumu
 - velmi praktické
 - s jednoduchým ovládáním

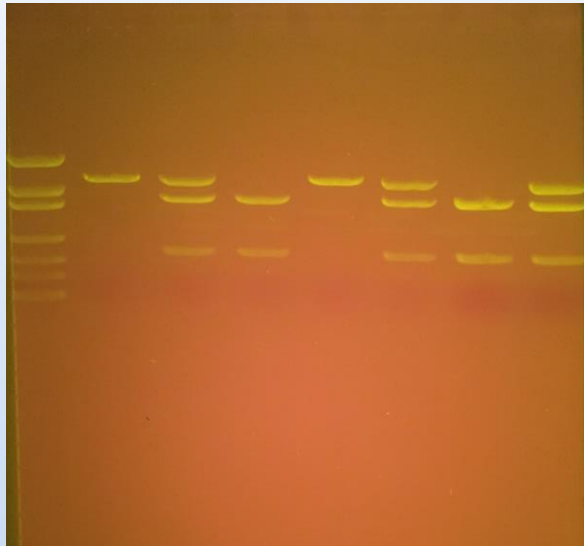


Jak to funguje prakticky?

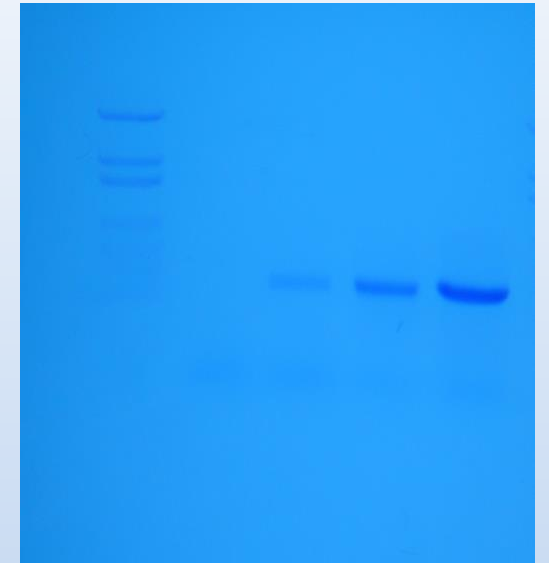
- přístroje jsou plnohodnotné verze srovnatelné s reálnými přístroji používanými při výzkumu
 - sledování průběhu elektroforézy volným okem
 - možnost focení mobilem



Jak to funguje prakticky?

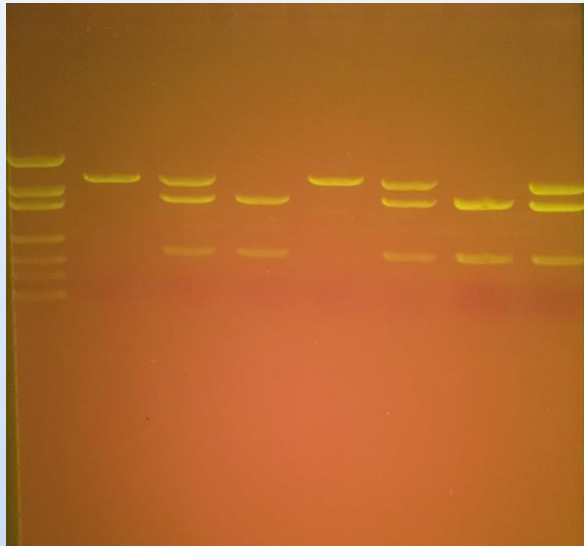


- barvení SYBR® Safe stain

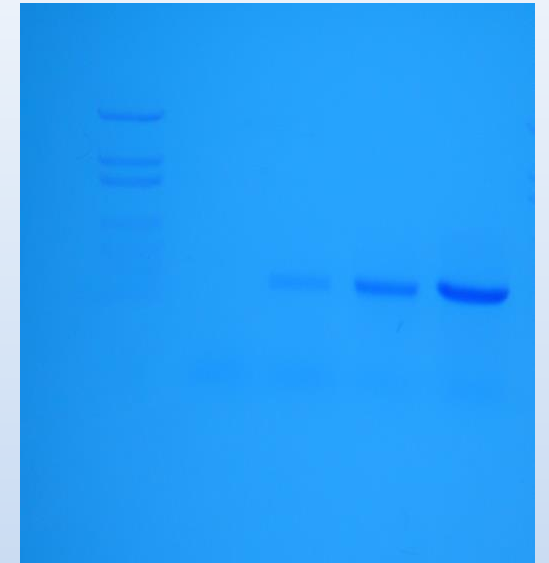
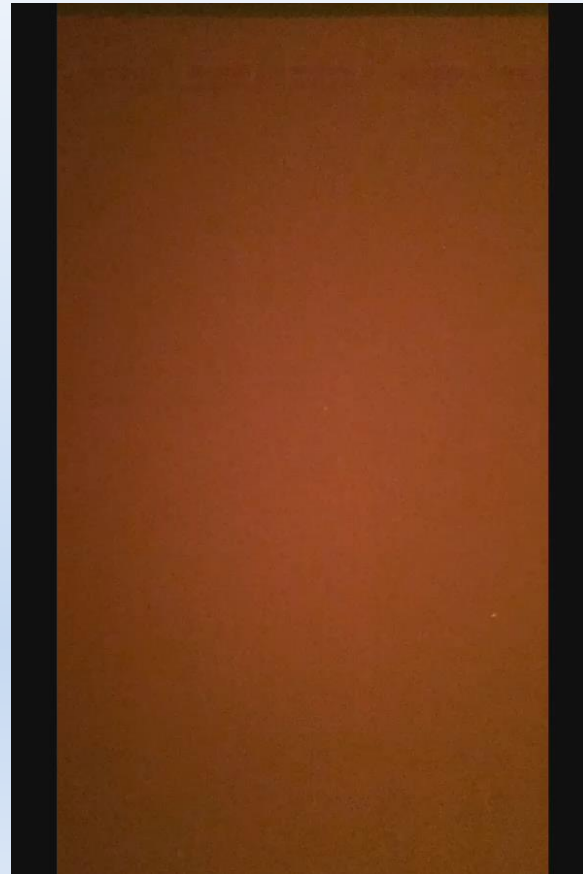


- barvení FlashBlue™ stain

Jak to funguje prakticky?



■ barvení SYBR® Safe stain



■ barvení FlashBlue™ stain

Pojďte vyučovat vědu moderně a zábavnou formou
se společnostmi EDVOTEK a M.G.P

