

Assessment of Purified Nucleic Acid

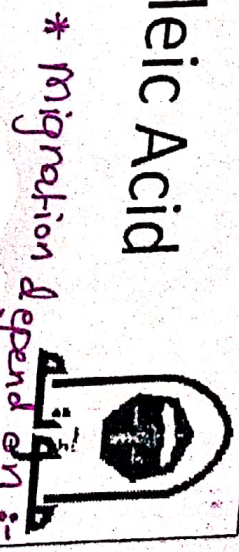
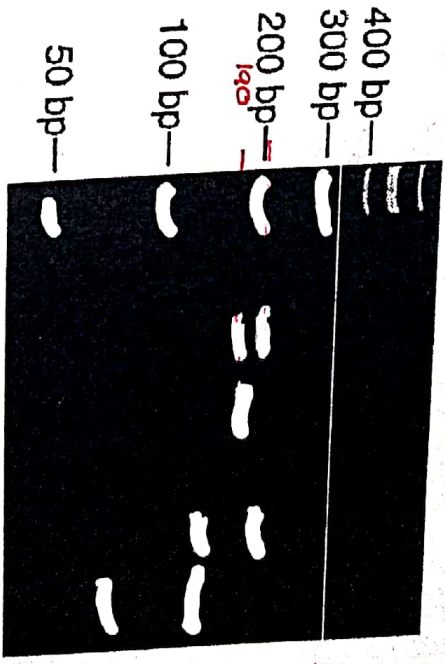
3. Gel electrophoresis:

Characterized of sample is "transparent" But we see here a blue sample why??



Blue sample

DNA ladder
1
2
3
4
5
6
7



لو جينا في تيريه
190 اسى Tube مع
4 =

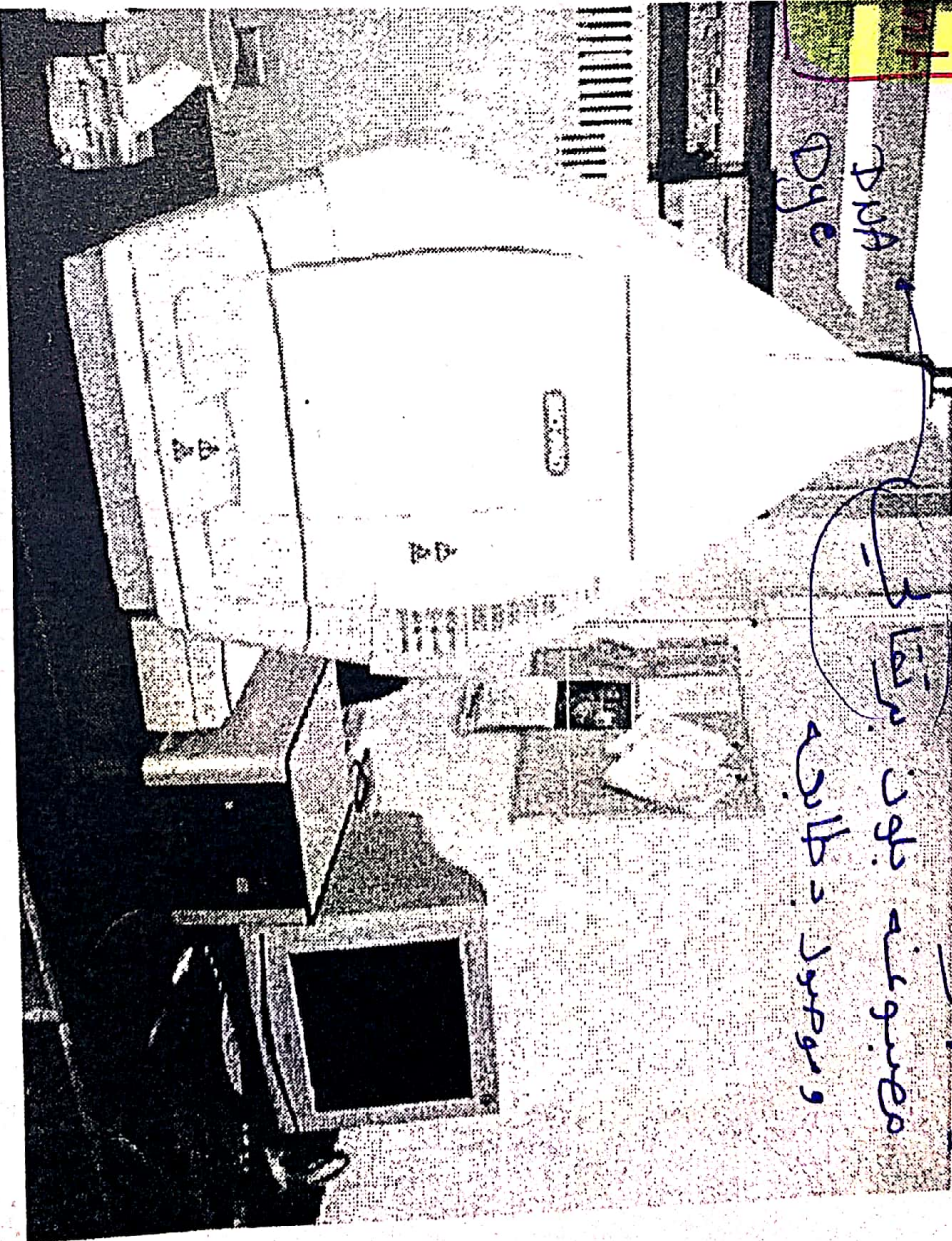
للكشف و جانا ان
هنا عيشه ختوي 100 bp
نفسه ال, لاننا
و جبر ان ختوي 1 band
لنزل بالنسبه لظنا
لا جود 100 bp
لجود ال لنتا
هنا ختوا

2.16 → why??

Because the 1Ml of Aqueous solution which confine "DVA or RVA" Tight weight
Once placed in well it will go out to tank with gel. SO, in order
to stabilized and increase the density of solution we will add loading
dye "DVA loading dye or RVA"

Assessment of Purified Nucleic Acid =

Each sample need check
I will put it in different
well



Gel documentation system "Gel Doc System"

dye

Small Band

DNA Dye
does intercalation in the Double strand of DNA

Assessment of Purified Nucleic Acid

1% agarose gel (1g/100ml)

Ethidium bromide is a fluorescent dye

replaced with gel red to stain nucleic acid

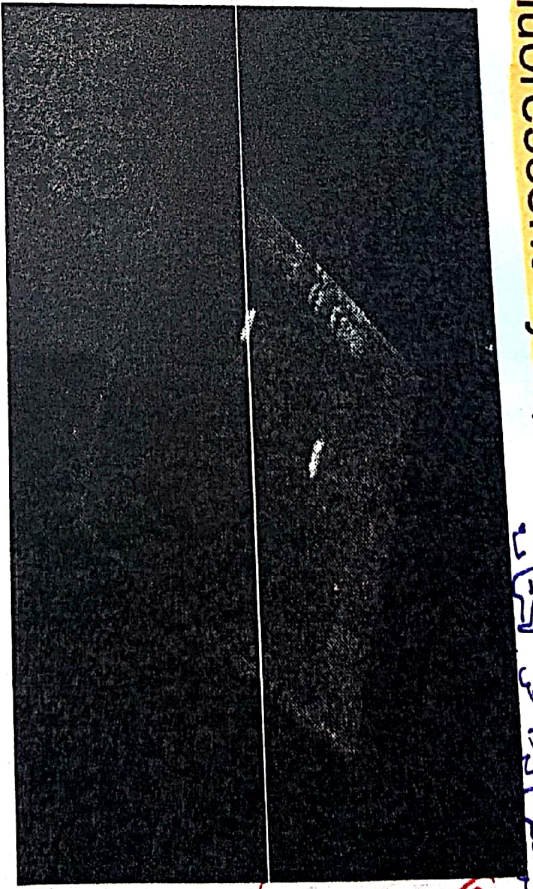
safe dye

From Bouilder

From Buffer

put it in microwave in order to melt then scale it in

carcinogenic dye

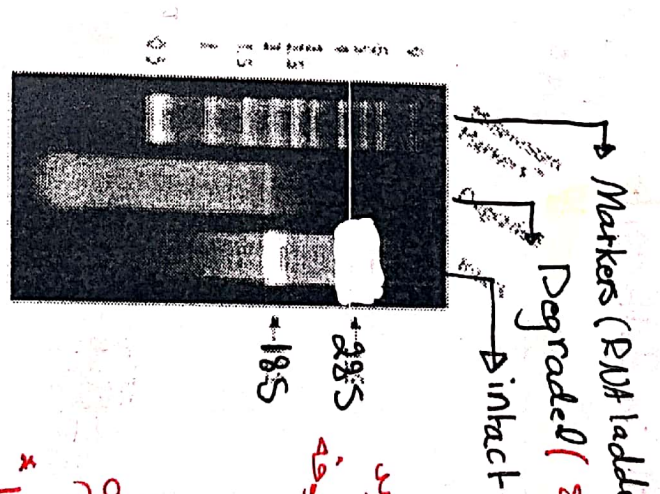
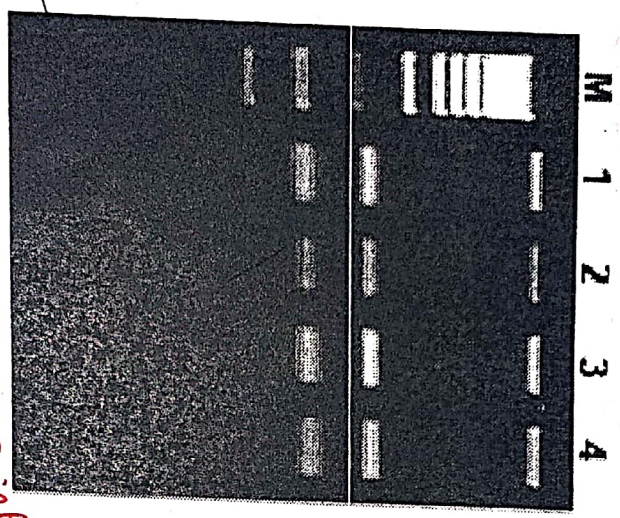
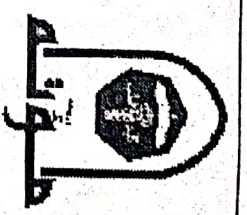


- Loading dye (blue in color) to track the migrated DNA/RNA
- DNA/RNA ladder (fragments with known sizes)

* increase the density

(loading of sample)
Comp
الشيء
الذي
يستخدم
لحمولة
العينة

Assessment of Purified Nucleic Acid



Total RNA very painful =
 Because it could be destroyed by exogenous RNA "hair, skin etc"

RNA
 mRNA
 rRNA
 tRNA

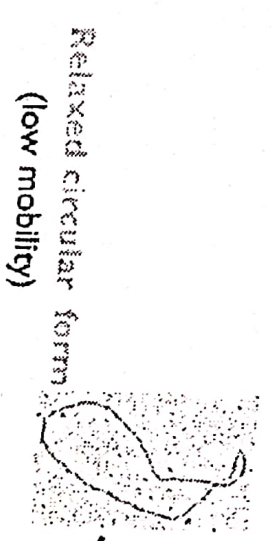
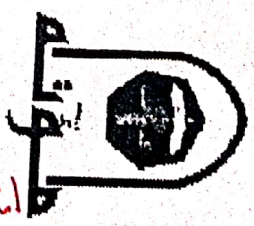
1:1
 1:1
 1:1
 1:1
 1:1
 1:1

الإنشيطا لو حسن
 الى هاتن استوفه
 RNA هو
 2 sub unit
 of ribosomal
 RNA
 * 18S و * 28S
 Band
 Completely separated
 From each other
 Fine and good
 (931)

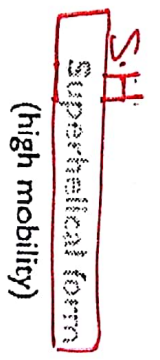
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Plasmid DNA

cloning vector

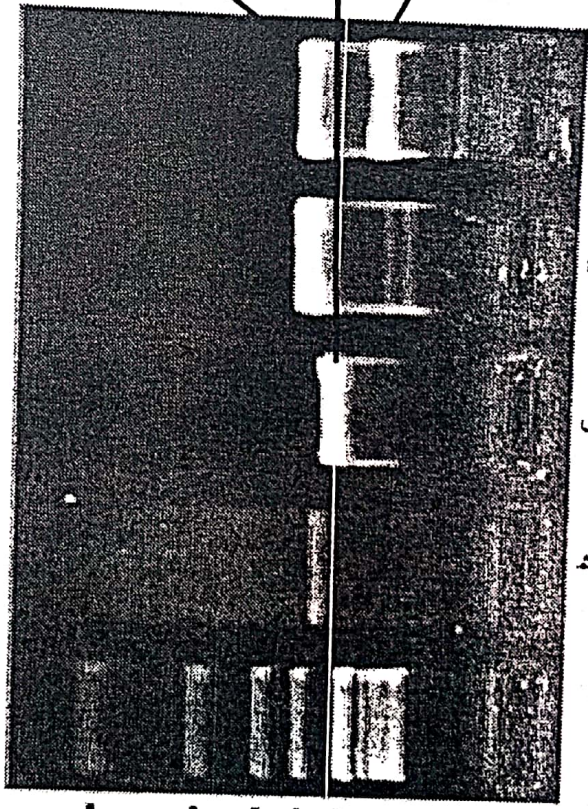


Linearized form
(moderate mobility)



* twisting
mobility

circu



1
2
3
4

2 Band
DPP
Ade
DPP
3.0

- 3.0 kb
- 2.0 kb
- 1.5 kb
- 1.0 kb
- 0.5 kb

unique restriction site
linearized plasmid

2 band = 2 bands
1 plasmid

1 MLE + restriction enzyme

* Plasmid with gene of interest

plasmid + gen