

DNA & RNA quality control * Open access after training session

Capillary electrophoresis



Fragment analyser  **Agilent**
RNA, amplicons, sequencing libraries

DNA	100-6000 bp	> 0,5 ng/μl
RNA	200-6000 nt	> 0,5 ng/μl



Femto Pulse  **Agilent**
Low input & long read samples

DNA	100-6000 bp	0,05-0,5 ng/μl
RNA	200-6000 nt	0,015-0,25 ng/μl

Tape Station 2200* et 4200  **Agilent**
Quick quality control



	High Sensitivity (HS)	Broad Sensitivity
Genomic DNA	5-300 ng/μl	
DNA 1000 _ 35-1000 bp	0,01 – 1 ng/μl	1-50 ng/μl
DNA 5000 _ 100-5000 bp	0,01 – 1 ng/μl	1-50 ng/μl
RNA	0,5-10 ng/μl	25-500 ng/μl

Fluorometer



Qubit* 
Accurate measurement of nucleic acid concentration

DNA	1,5 – 2000 ng/μl
RNA	1,2 – 1600 ng/μl

UV/vis Spectrophotometer

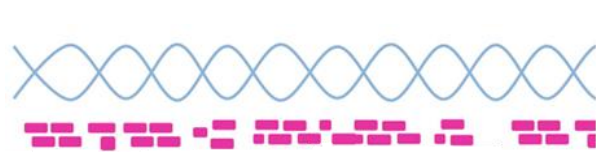


Xpose* Lunatic 
Quick measurement of nucleic acid concentration with qualitative indicators

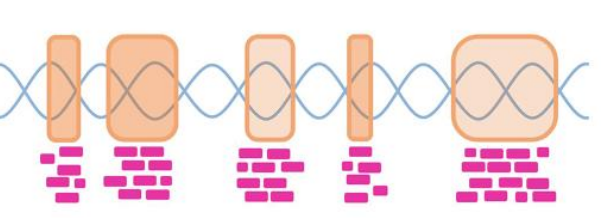
	High Sensitivity (HS)	Broad Range (BR)
ds DNA	0,1 – 120 ng/μl	4 – 4000 ng/μl
ss DNA	0,2 – 240 ng/μl	
RNA HS	0,2 – 200 ng/μl	0,5 – 1200 ng/μl

Short read sequencing

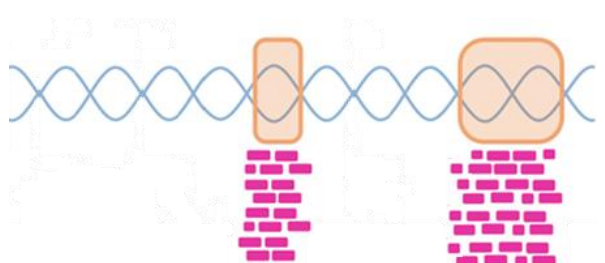
DNA



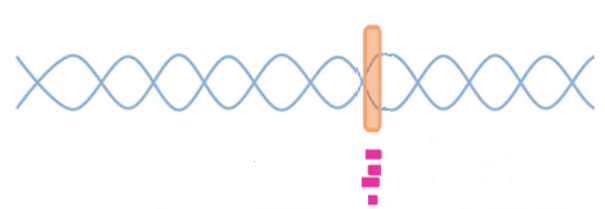
Whole Genome Sequencing
25-30X



Exome : standard, saline, cancer
80X to 160X

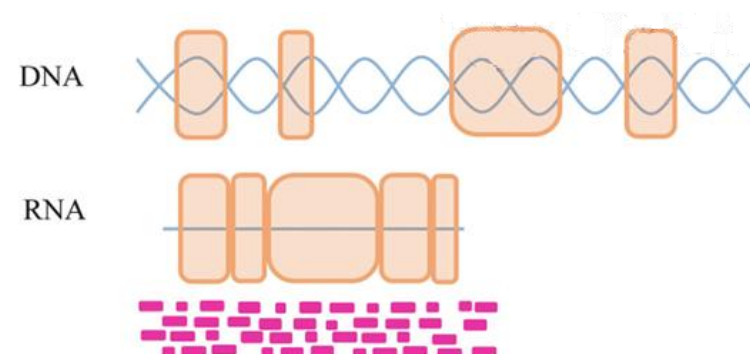


Targeted resequencing of genes panels



Amplicon sequencing
Approach by ligation or by PCR

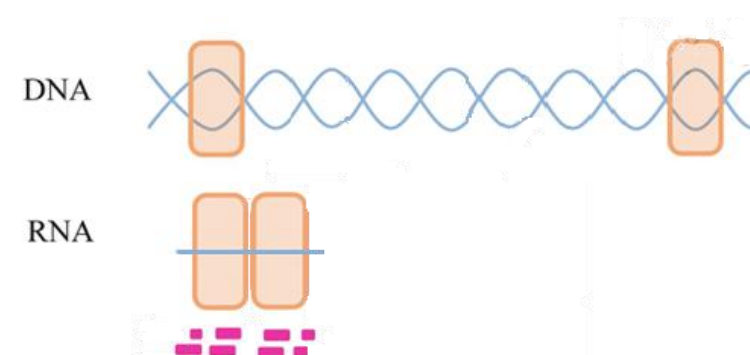
RNA



mRNA-Seq
Transcriptome standard
Transcriptome low quantity



Ribodepletion



RNA capture
Exomes & Custom panels



Sequencing only
Single Cell, Cut & Tag, Chip Seq...

Sequencer



NovaSeq 6000 
800-10000 millions de reads



iSeq 
3,5 millions de reads

Long read sequencing

DNA



Plasmid QC

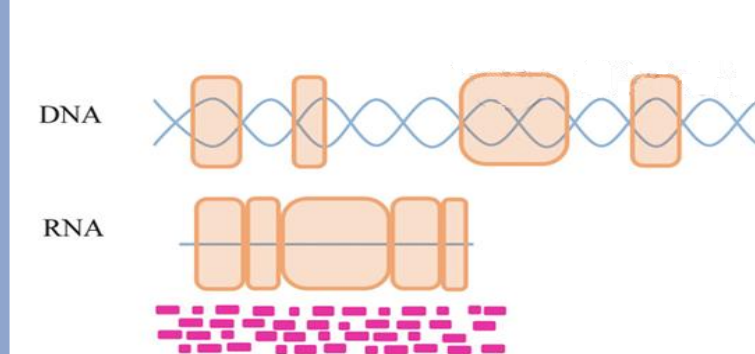


Amplicon Seq



Whole genome Seq

RNA



cDNA sequencing

Sequencer



P2Solo 
R10.4.1 flow cells

Shearing * Open access after training session

Ultrasonicator



E220 & R230 
Starting material : > 50 Kb
Shearing from 150 pb to 1.5 Kb
Material : <5μg in 130μl

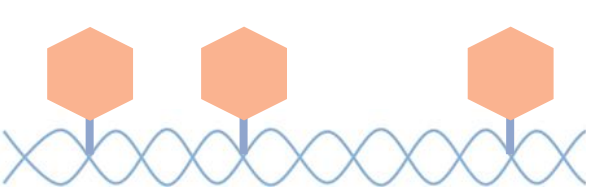
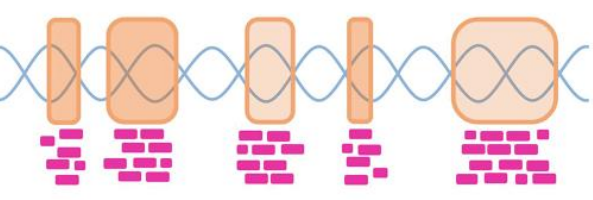
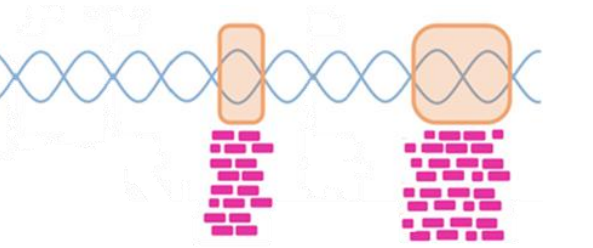
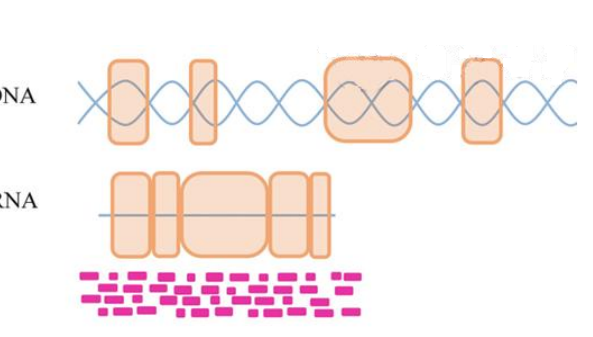
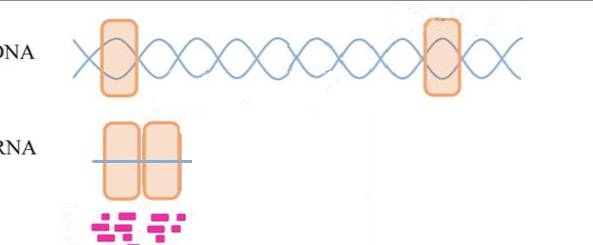
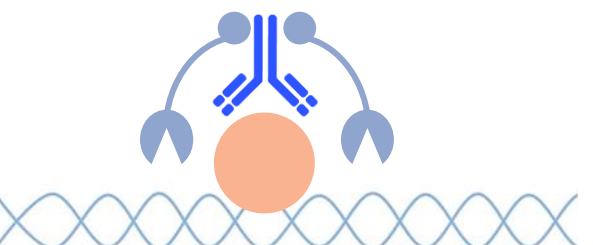
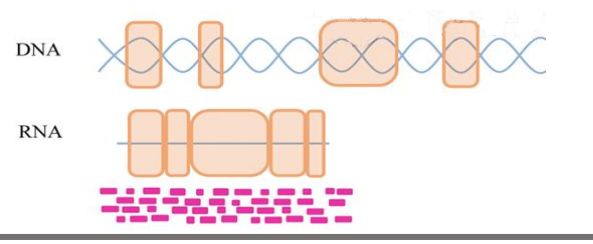


Contact us to set up dedicated protocols

This sheet gives information about **quality control** and **sequencing services** provided on the Genomic core facility at Imagine in 2025.

DNA & RNA quality control <i>Open access * after training session</i>	Fragment analyser  	Femto Pulse  	Tape Station 2200 et 4200  	Qubit  	Xpose Lunatic  
	Capillary electrophoresis			Fluorometer	UV/Vis spectrophotometer
Genomic DNA		1.3-165 kb 25 to 500 pg/µl	5 to 300 ng/µl	High sensitivity : 0.1 to 200 ng/µl Broad range : 4 to 4000 ng/µl	30 to 1000 ng/µl
Amplicons, sequencing libraries	100-6000 bp > 0.5 to 5 ng/µl	100-6000 bp 0.1 to 250 pg/µl	35 to 5000 bp 0,1 to 50 ng/µl		
RNA	200-6000 nt > 0.5 to 5 ng/µl	1-6000 nt > 2.5 to 500 pg/µl	0.5 to 500 ng/µl	1.2 to 1600 ng/µl	30 to 1000 ng/µl

Sequencing services include both **short-read** and **long-read** technologies, **outsourcing** options can also be provided in order to expand the services catalog or to reduce the cost and duration of standard applications.

Sequencing services in 2025			NovaSeq6000  illumina®	Promethion  Oxford NANOPORE technologies	Revio  PacBio	 institutCurie Ensemble, prenons le cancer de vitesse. 
			Short read	Long read		Out sourced
DNA	Whole Genome Sequencing				>3 µg gDNA >35 kb	Contact us for more information about outsourced sequencing
	Methylation				>3 µg gDNA >35 kb	
	Exome standard, saline, cancer		>300 ng gDNA 			
	Targeted resequencing of genes panels		>1000 ng gDNA 			
	Amplicon sequencing		Approach by ligation or by PCR	150 to 20000 bp > 50 ng purified		
RNA	mRNA-Seq Transcriptome standard Transcriptome low quantity		Standard : 300-1000 ng Low input : 1-200 ng  		>300 ng RNA RIN > 7	
	Ribodepletion		> 200 ng RNA illumina®			
	RNA capture / RNA capture Single Cell		Home made panels > 200 ng RNA 			
	Cut & Run		Currently undergoing tests 			
	cDNA sequencing			> 500 ng RNA		
Other	Plasmid Quality Control			> 200 ng purified > 10µl		
	Sequencing only		Single Cell, Cut & Tag, Chip Seq...    			

Contact us for more information or to set up dedicated protocols :
genomique@users-imagine.fr