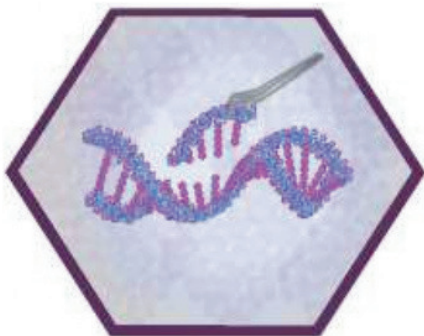
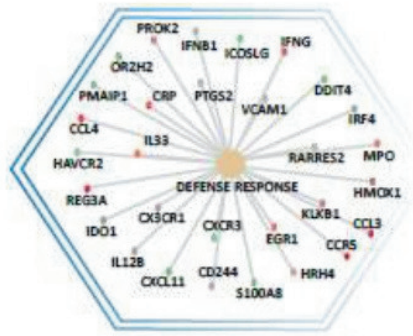


**AnyGenes TRANSLATIONAL MULTIPLATFORM  
 ACCELERATES THE DEVELOPMENT OF YOUR PROJECTS**

More than 15 years  
 of successful molecular  
 services in drug development



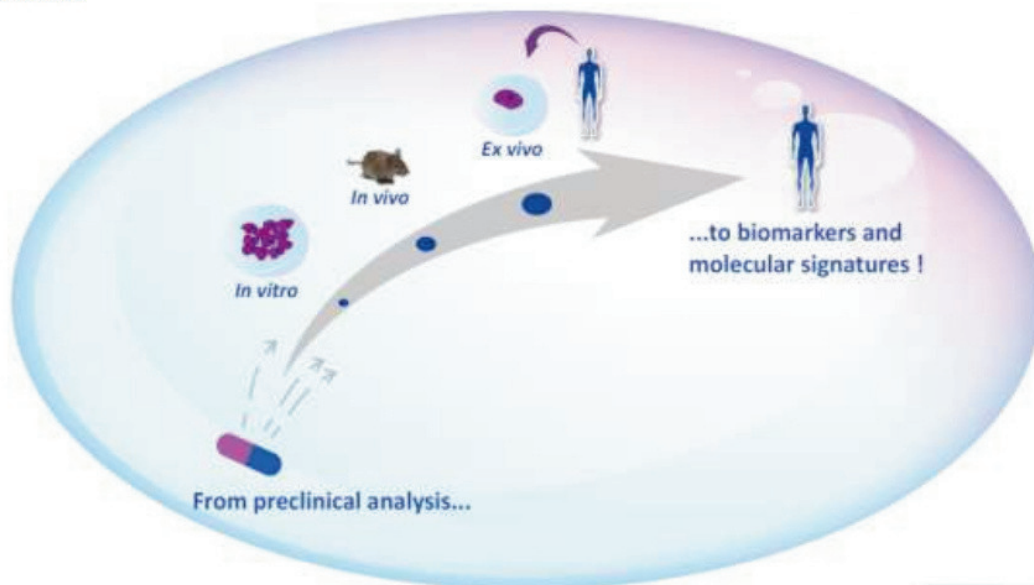
**Knock-in and Knock-out  
 models**



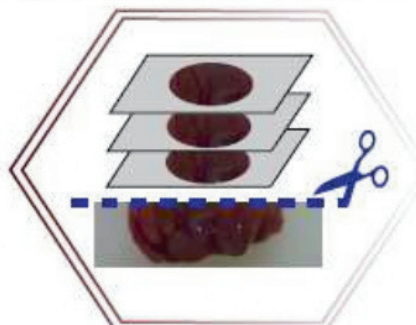
**Signaling Pathways &  
 Data Analysis**



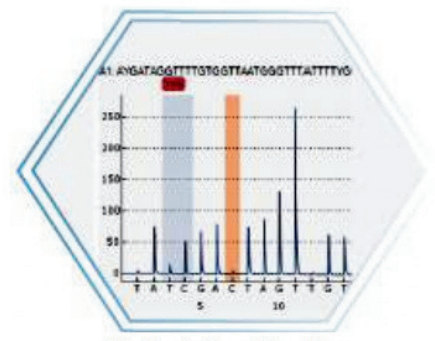
**Biomarker Identification &  
 Validation**



**In Vitro Drug Development**



**Histoculture Drug Response  
 Assays**



**Methylation Studies**

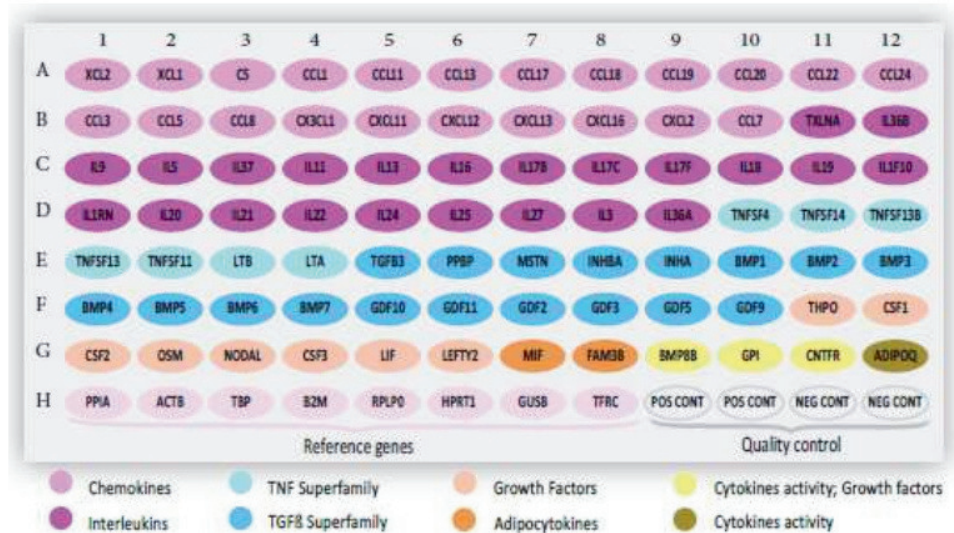
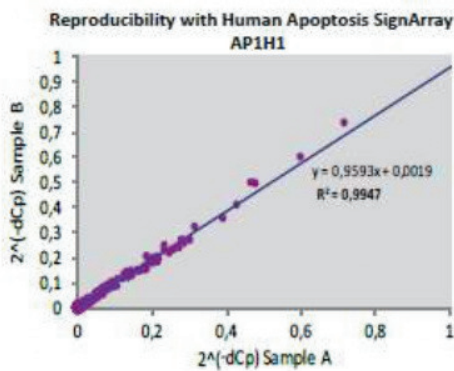
AnyGenes® provides full **services** for **biomarker discovery** and validation based on various technologies including our **qPCR arrays technology** (SignArrays) specific to any **signaling pathways** with high efficiency, specificity, reliability and reproducibility.

✓ **Proprietary SignArrays® system to explore signaling pathways**

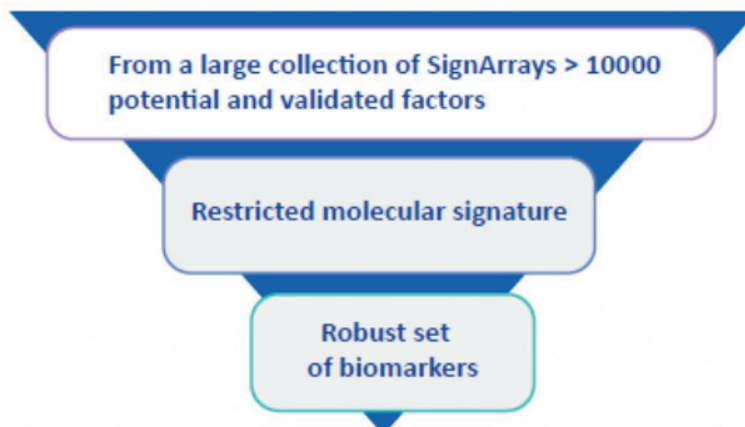
AnyGenes database with more than **300 validated signaling pathways** ready to use :

With efficient protocols routinely used to explore signaling pathways for various biological samples: biopsies, cell lines, blood, FFPE... from various species: human, mice, rat, zebrafish...

<b>Pharmacological Pathways</b>	Drug Resistance	Drug Metabolism	Drug Neurotoxicity	Drug Nephrotoxicity
	Inflammation	Apoptosis	Autophagy	Necrosis
<b>Signaling Pathways</b>	Cell Cycle	EndoMT	Cytokines	Cell Proliferation
	Cell Motility	Oxidative Stress	Fibrosis	Growth Factors
<b>Autoimmune Diseases</b>	Crohn	Thyroiditis	Autism	Multiple Sclerosis
<b>Neurodegenerative Diseases</b>	Alzheimer	Parkinson	Huntington	Lysosomal Storage

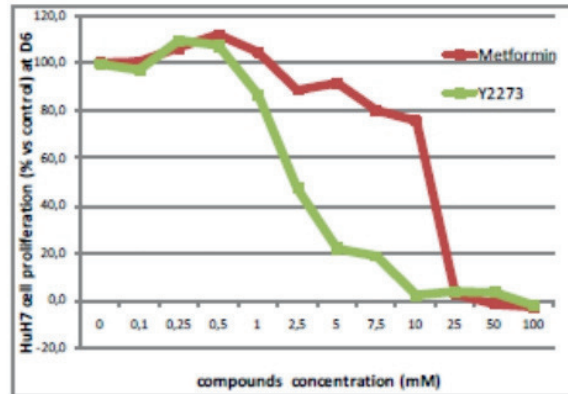


✓ **Biomarker identification & validation**

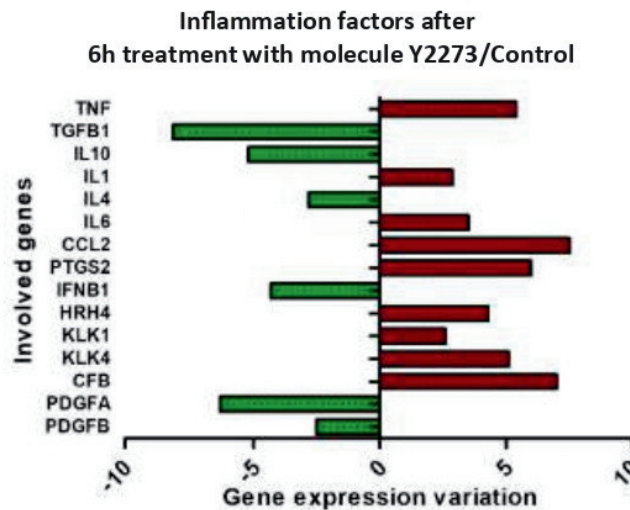




- Compound profiling by using our **large panel of cancer cell lines**
- Cell lines engineering based on genome editing technologies
- Molecular screening for mechanism of action (MOA), proof of concept (POC) and biomarker signatures
- Molecular signatures for laboratory models (KO mice...)
- Large transcriptome analysis NGS, SignArray...
- Western blot, Elisa Assays...
- Cell culture for **proliferation and functional assays** to evaluate IC50

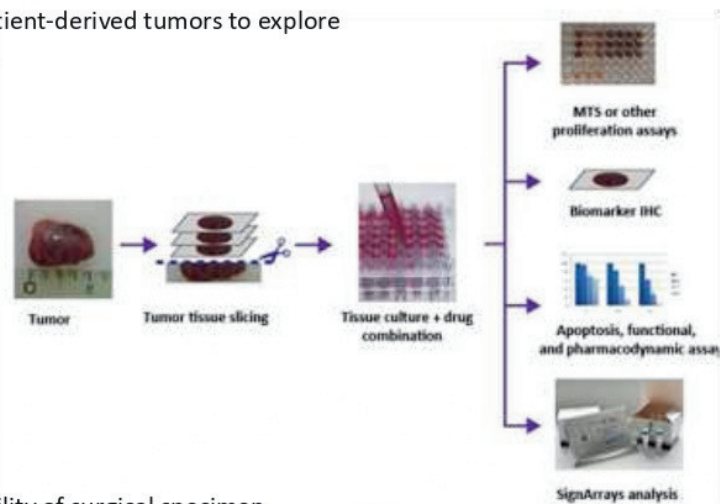


- **High-throughput signaling pathways screening** to identify biomarkers, molecular signatures and mechanism of action



### ✓ Histoculture Drug Response Assays (HDRA)

Use our ex-vivo histoculture protocols patient-derived tumors to explore the effect of your new therapeutic drugs.

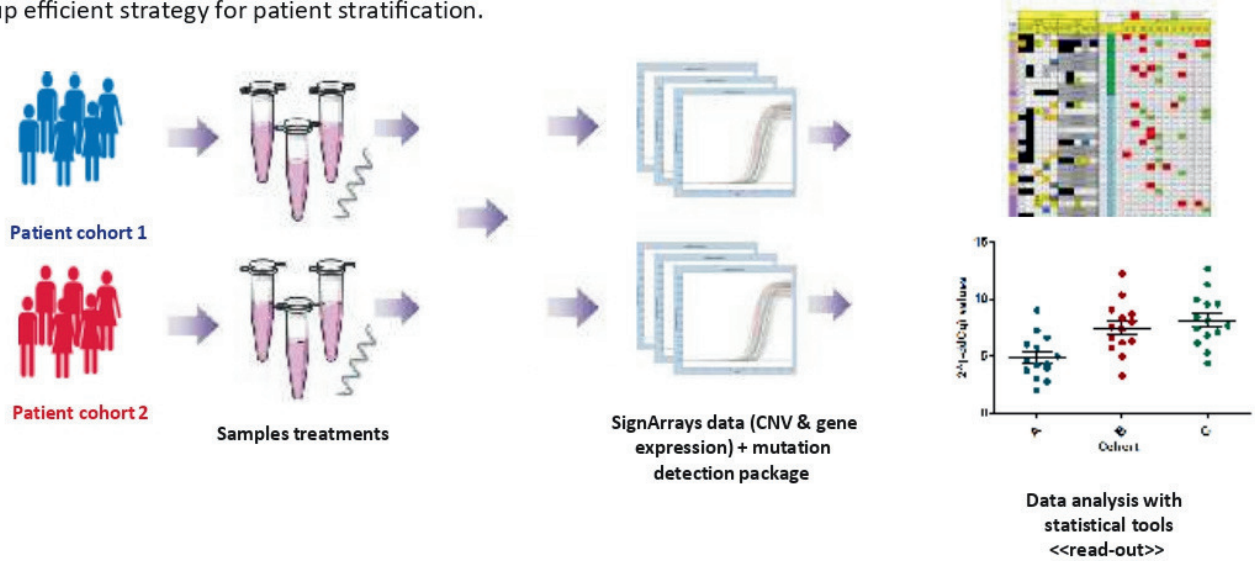


**Note:** this service depends on the availability of surgical specimen

## ✓ Patients stratification (CDx assays for precision medicine)

From preclinical and translational data to clinical applications.

Development of specific CDx (Companion Diagnostic) based on mechanism of action and biomarker signatures of your molecule to set up efficient strategy for patient stratification.



The most optimal strategy for ensuring developmental and clinical success of your molecules for precision medicine and accelerating of time to market.

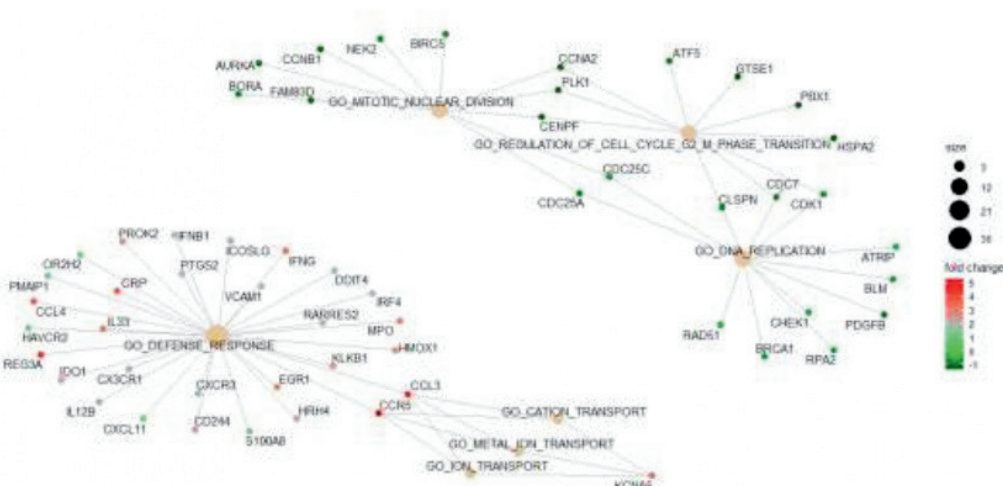
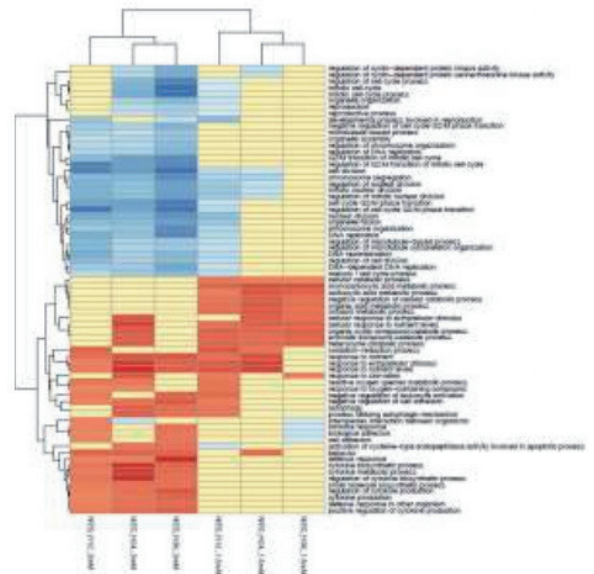
AnyGenes has a strong R&D collaborations on specific diseases with clinicians from hospitals.

## ✓ Data analysis

AnyGenes GSEA system based bioinformatics tools :

- The most likely signaling pathways targeted by your molecule, according to their p-value
- List of factors for each signaling pathway with their expression level (fold change)
- List of diseases targeted by these drugs, for new potential indications (**diseases-oriented repositioning**)

.. and much more !



# EPIGENETIC AND METHYLATION ANALYSIS

## ✓ Methylation and epigenetic studies

Analysis of epigenetic events by:

- quantifying **gene expression** for enzymes involved in **epigenetic** events by **qPCR arrays** (SignArrays®).
- quantifying a large panel of **LncRNA** (long non coding RNA)
- assessing **methylation** of CpG islets with **pyrosequencing** technology.

All our **qPCR** and **pyrosequencing** assays are validated on cDNA or gDNA provided from our large collection of tissues and cell lines..

From sample processing to **data analysis** and results report, we can manage all your **pyrosequencing** and **signaling pathways** projects.

### ➤ Epigenetic analysis with specific SingArrays

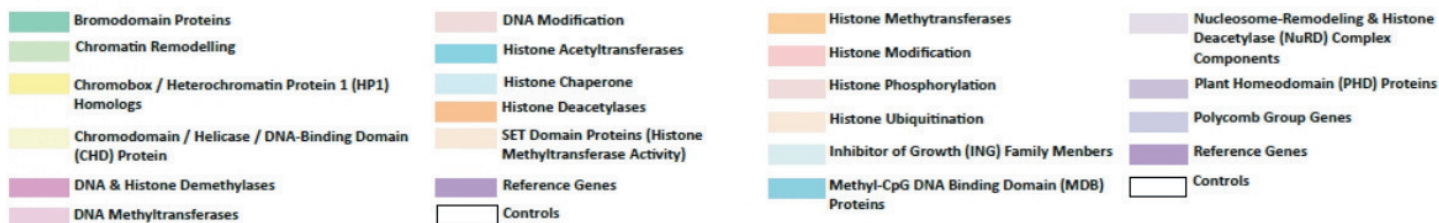
To analyse **epigenetic** regulation of **signaling pathways**, including a **large panel of LncRNA**

Epigenetic Regulation 1 SignArrays® Ref: ER1H1

	1	2	3	4	5	6	7	8	9	10	11	12
A	BAZ1A	BAZ1B	BAZ2A	BAZ2B	BPTF	BRD1	BRD2	BRD3	BRD4	BRD7	BRD8	BRDT
B	BRPF1	BRPF3	BRWD1	BRWD3	WDR11	ACTL6A	ARID2	GADD45B	SATB1	SMARCC2	YY1	SMARCA1
C	RB1	CTCF	CBX1	CBX3	CBX4	CBX5	CBX6	CBX7	CBX8	CDYL	CDYL2	CHD1
D	CHD2	CHD3	CHD4	CHD5	CHD6	CHD7	CHD8	CHD9	KDM1A	KDM4A	KDM4E	KDM5B
E	KDM5C	KDM6B	DNMT1	DNMT3A	DNMT3B	TET2	ATF2	CITA	CSRP2BP	ESCO1	ESCO2	HAT1
F	KAT2A	KAT2B	KAT5	KAT6A	KAT6B	KAT7	KAT8	NCOA1	NCOA3	NCOA6	RBBP4	RBBP7
G	HDAC1	HDAC10	HDAC11	HDAC2	HDAC3	HDAC4	HDAC5	HDAC6	HDAC7	HDAC8	HDAC9	ASH1L
H	PPIA	ACTB	TBP	B2M	RPLP0	HPRT1	TFRC	GUSB	POS CONT	POS CONT	NEG CONT	NEG CONT

Epigenetic Regulation 2 SignArrays® Ref: ER2H1

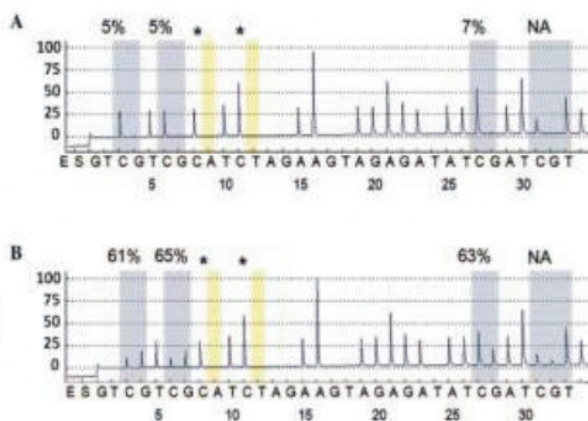
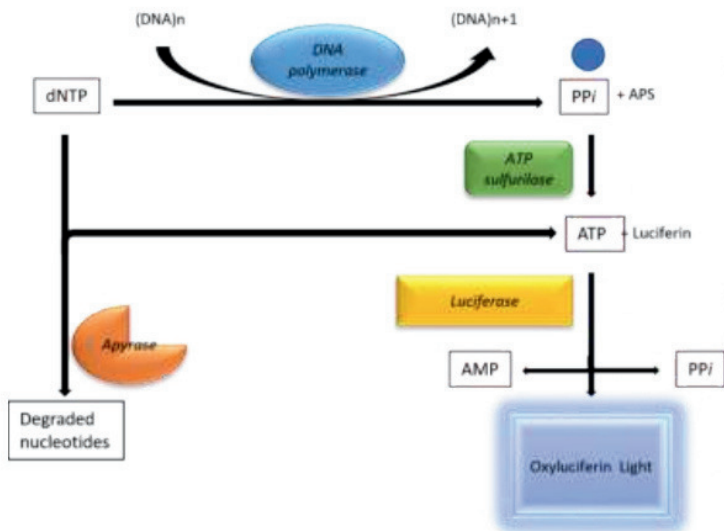
	1	2	3	4	5	6	7	8	9	10	11	12
A	CARM1	DOT1L	EHMT2	KMT2A	KMT2C	PRMT1	PRMT2	PRMT3	PRMT5	PRMT6	PRMT7	PRMT8
B	SETDB2	SMYD3	SUV39H1	ARID1B	ASH2L	ATF7IP	ATM	BCORL1	CBX2	CREBBP	EHMT1	EZH1
C	EZH2	HSPA1A	JARID2	KDM4B	KDM6A	KMT2D	MEN1	PRDM1	PRKCA	RBBP5	SIRT1	SMARCB1
D	TRRAP	WDR5	AURKA	AURKB	AURKC	NEK6	PAK1	RPS6KA3	RPS6KA5	DZIP3	MYSM1	RNF20
E	UBE2A	UBE2B	USP16	USP21	USP22	ING1	ING2	ING3	ING4	ING5	RING1	HINFP
F	MBD1	MBD2	MBD4	MECP2	MBD3	MTA1	MTA2	NAB2	SPEN	NSD1	PHF1	PHF13
G	PHF2	PHF21A	PHF3	PHF5A	ASXL2	BCOR	BMI1	CTBP1	CTBP2	PHC3	SUZ12	TRIM27
H	PPIA	ACTB	TBP	B2M	RPLP0	HPRT1	TFRC	GUSB	POS CONT	POS CONT	NEG CONT	NEG CONT



### ➤ Pyrosequencing technology to explore DNA methylation

Each **project is unique** and needs to validate each step of pyrosequencing technology for specific hot spot with strict quality controls for high quality results.

Our team will help to set up specific **pyrosequencing** services for **DNA methylation** analysis.



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CliniSciences Group



### ✓ Team that you can trust

Explore the potential cost and time savings benefits of working with AnyGenes translational platform.

Data transmission via secure link

[contact@anygenes.com](mailto:contact@anygenes.com)

### ✓ Selected references

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### Some of our partners



Important list of biotech and pharma partners that we cannot disclose names with respect to confidentiality agreement



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