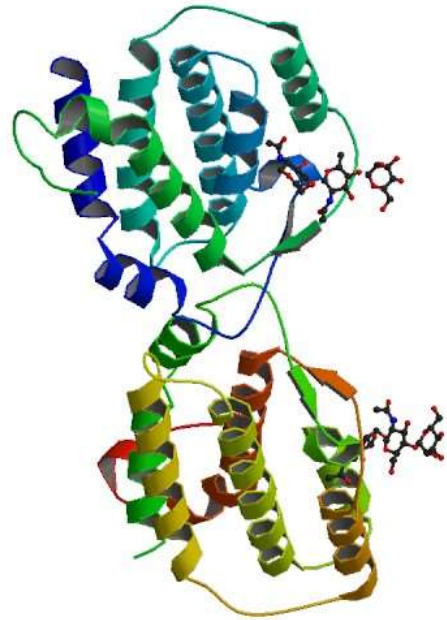


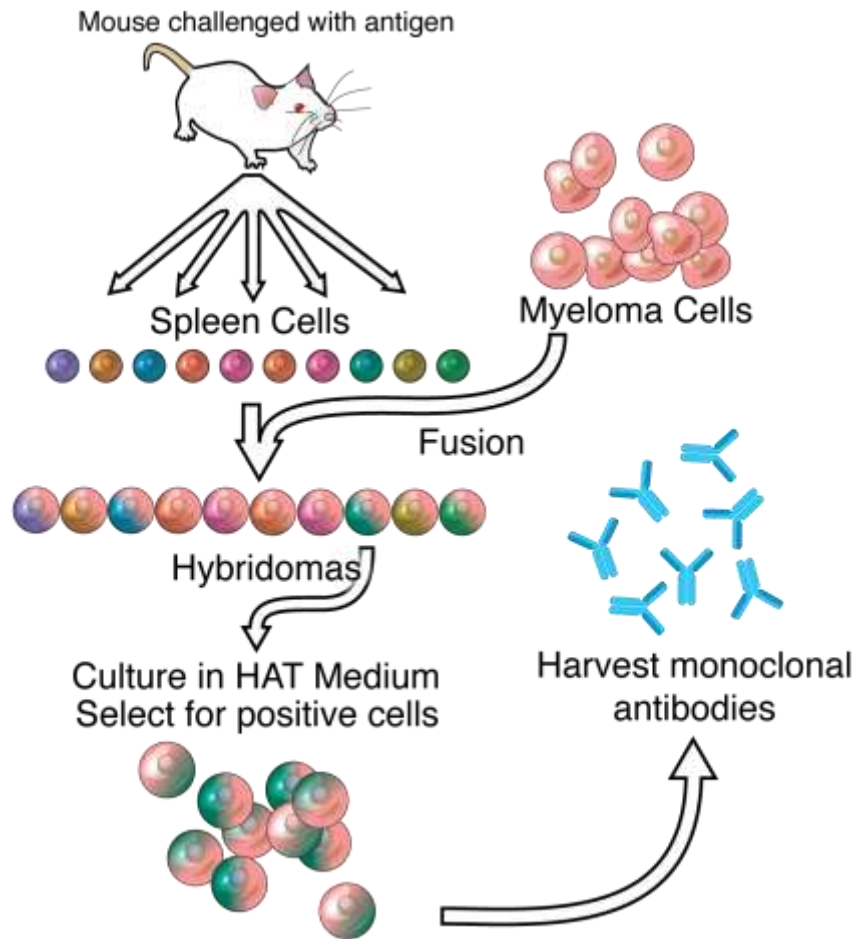


Revolutionize cancer diagnostic :
Generation of the first anti-histone PTM

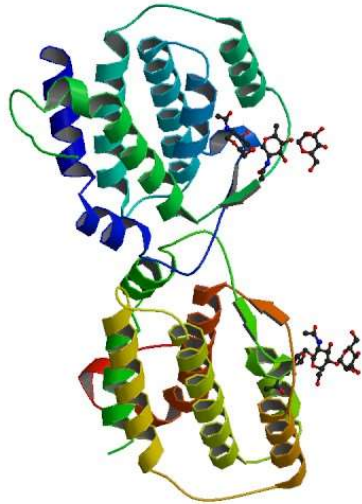
Why has SynAbs been founded?



Why has SynAbs been founded?



SynAbs becomes rat mAb expert



SP|Q8R1R4|IL34_MOUSE MPWGLAWLYCLGILLDVALGNENLEIWTLTQDKECDLTGYLRGKLQYKNRLQYMKHYFPI 60
SP|Q4KM46|IL34_RAT MPWGLAWLYCLGILLDVALGNENLEIWTLAQDKECDLTGYLRGKLQYKNRLQYMKHYFPI 60

SP|Q8R1R4|IL34_MOUSE NYRIAVPYEGVLRVANITRLQKAHVSERELRYLWVLVSLNATESVMDVLEGHPSWKYLQ 120
SP|Q4KM46|IL34_RAT NYRIAVPYEGVLRVANITRL-KAHVSERELRYLWVLVSLNATESVLDVLEGHPSWKYLQ 119

SP|Q8R1R4|IL34_MOUSE EVQTLEENVQRSLMDVEIGPHVEAVLSLLSTPGLSLKLVKALDNCFRVMELLYCSCC 180
SP|Q4KM46|IL34_RAT EVQTLEENVQRSLMDVEIGPHVEAVLSLLSTPGLSLKLVKALDNCFRVMELLYCSCC 179

SP|Q8R1R4|IL34_MOUSE KQSPILKWQDCELPRLHPHSPGSLMQCTATNVYPLSRQTPTSLPGSPSSSHGSLP 235
SP|Q4KM46|IL34_RAT KQSPILKWQDCELPRLHPHSPESLMQCAATNVYPLPRQPPTSLPRSPSSNHGGLP 234

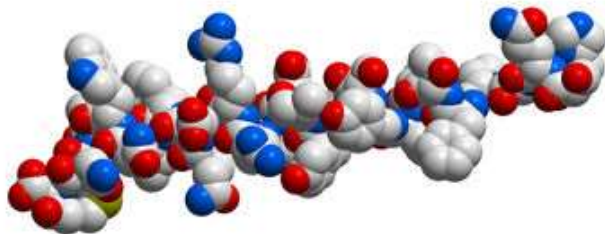
SynAbs becomes rat mAb expert



SynAbs becomes rat mAb expert

- ✓ Excellent for **small molecules** (antibiotics, toxins, steroids)
- ✓ Host variation offers **different antibody responses**
- ✓ Access to the **lymph nodes**
- ✓ No special growth media required
- ✓ Pair with existing mouse antibodies in **sandwich assays**
- ✓ **Multiple labelling** possibility
- ✓ Stable and productive homohybridoma thanks to our **proprietary rat IR983 fusion cell line**

SynAbs : coping a new challenge

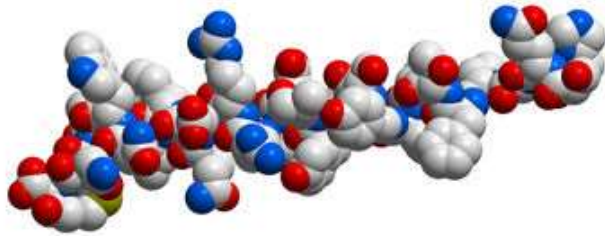


SP|P01275|GLUC_HUMAN MKSIYFVAGLFVMLVQGSWQSLQDTEEKSRFSASQADPLSDPDQMNEKDRHSQGTFTS 60
SP|P55095|GLUC_MOUSE MKTIYFVAGLLIMLVQGSWQHALLQDTEENPRSFASQTEAHEDPDEMNEKDRHSQGTFTS 60
SP|P06883|GLUC_RAT MKTVYIVAGLFVMLVQGSWQHAPQDTEENARSFPASQTEPLEDPDQINEDKDRHSQGTFTS 60

SP|P01275|GLUC_HUMAN DYSKYLDSRRAQDFVQWLMNTKRNRNNIAKRHDEFERHAEGTFTSDVSSYLEGQAAKEFI 120
SP|P55095|GLUC_MOUSE DYSKYLDSRRAQDFVQWLMNTKRNRNNIAKRHDEFERHAEGTFTSDVSSYLEGQAAKEFI 120
SP|P06883|GLUC_RAT DYSKYLDSRRAQDFVQWLMNTKRNRNNIAKRHDEFERHAEGTFTSDVSSYLEGQAAKEFI 120

SP|P01275|GLUC_HUMAN AWLVKGRGRRDFPEEVAIVEELGRRHADGSFSDEMNTILDNLAARDFINWLIQTKITDRK 180
SP|P55095|GLUC_MOUSE AWLVKGRGRRDFPEEVAIAEELGRRHADGSFSDEMSTILDNLATRDFINWLIQTKITDKK 180
SP|P06883|GLUC_RAT AWLVKGRGRRDFPEEVAIAEELGRRHADGSFSDEMNTILDNLATRDFINWLIQTKITDKK 180

SynAbs becomes singular mAbs expert

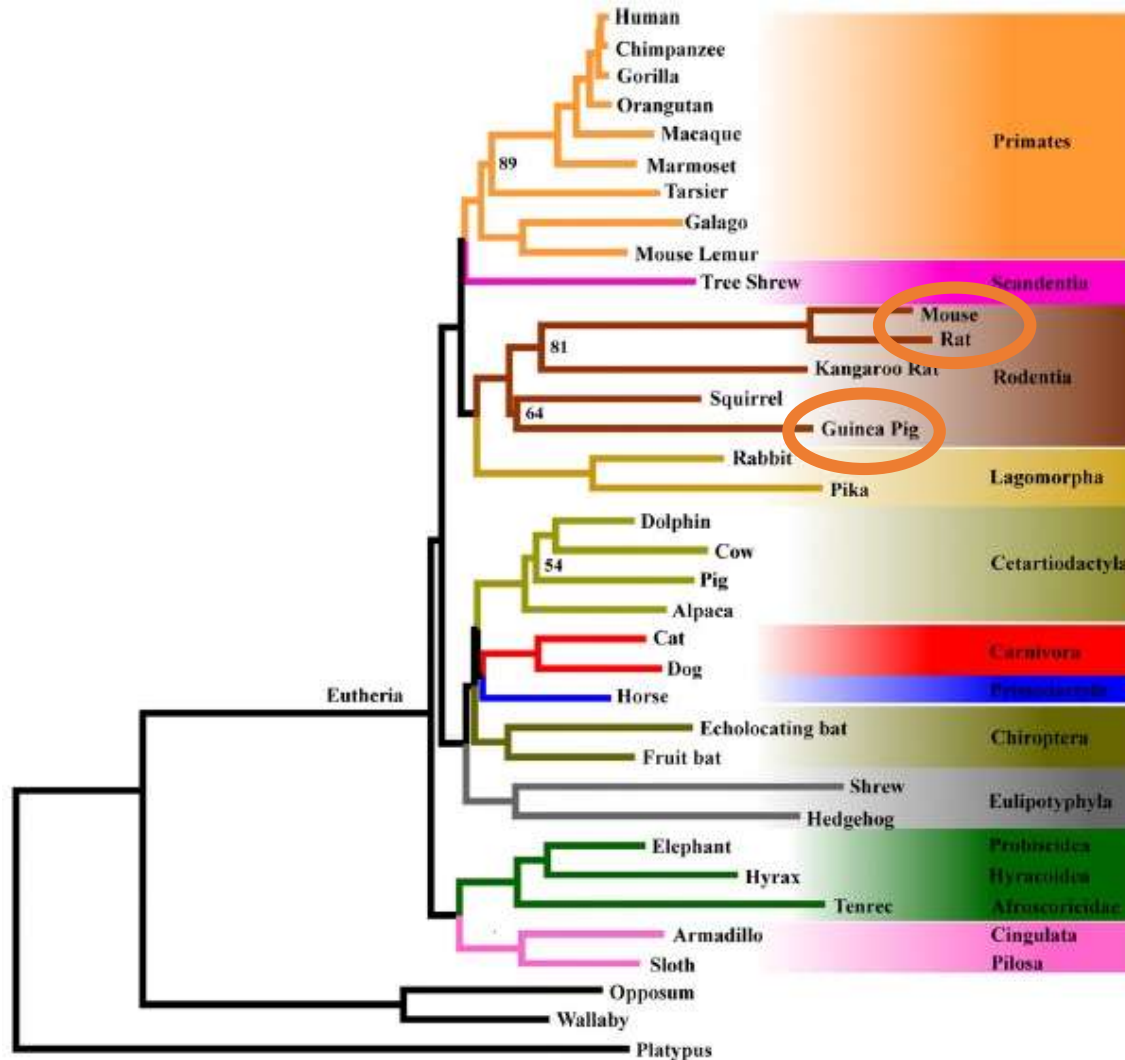


SP|P01275|GLUC_HUMAN MKSIYFVAGLFVMLVQGSWQRSLQDTEEEKSRSFSASQADPLSDPDQMNE DKRHSQGTFTS 60
SP|P05110|GLUC_CAVPO MKSVYFVAGLFIMLAQGSWQRSLQDTEEKPRSVSASQTDMLDDPDQMNE DKRHSQGTFTS 60

SP|P01275|GLUC_HUMAN DYSKYLDSRRAQDFVQWLMNTKRNRRNNIAKRHDEFERHAEGTFTSDVSSYLEGQAAKEFI 120
SP|P05110|GLUC_CAVPO DYSKYLDSRRAQQFLKWLLNVKRNRRNNIAKRHDEFERHAEGTFTSDVSSYLEGQAAKEFI 120

SP|P01275|GLUC_HUMAN AWLVKGRGRRDFPEEVAIVEELGRRHADGFSDEMNTILDNLAAARDFINWLIQTKITDRK 180
SP|P05110|GLUC_CAVPO AWLVKGRGRRDFPEEVAIVEELGRRHADGFSDEMNTILDNLATRDFINWLIQTKITDRK 180

SynAbs becomes singular mAbs expert



SynAbs : Singular Antibodies



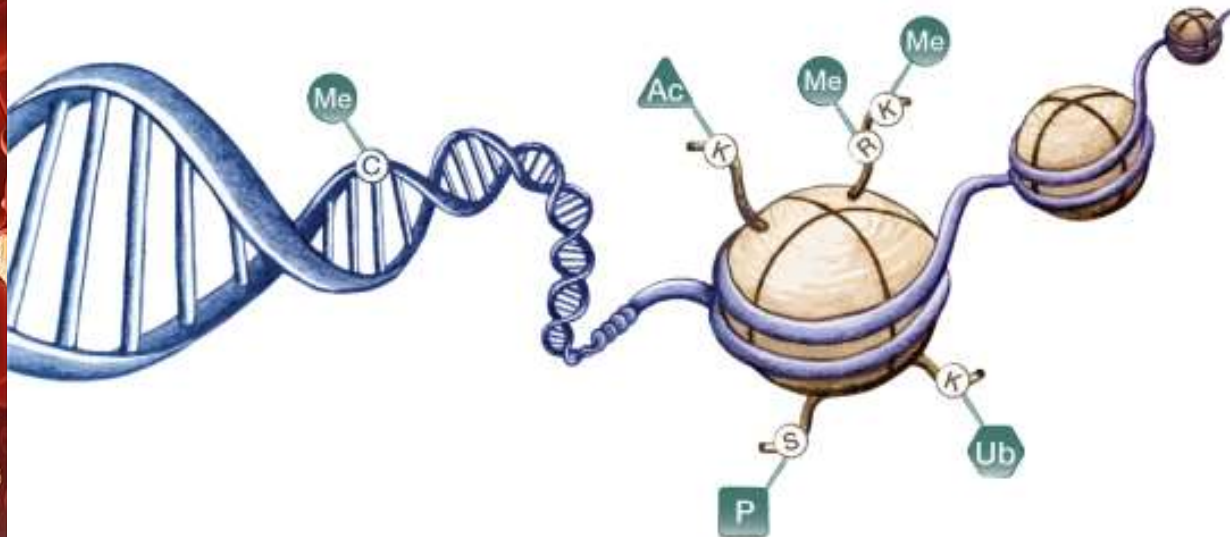
- ✓ A large catalog, distributed by worldwide leaders
- ✓ Tailor-made services, from antigen synthesis to mAbs generation!
- ✓ Multi-species immunisation for a competitive price
- ✓ R&D Partnership, added value for codevelopment program

SynAbs case study

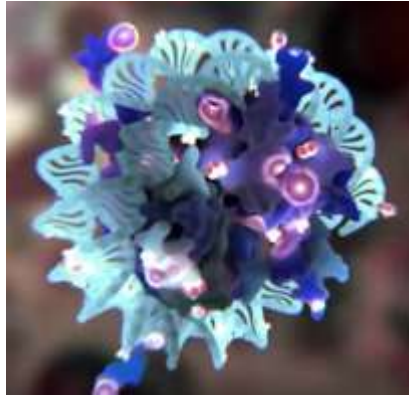
Revolutionize cancer diagnostic :
Generation of the first anti-histone PTM



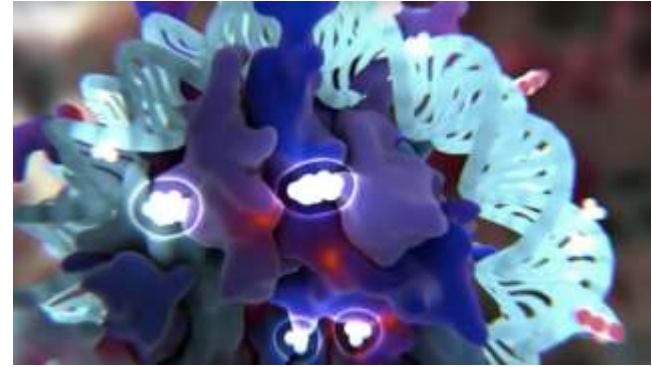
Why has VolitionRx been founded?



Nucleosomics® technology : a new army of biomarkers



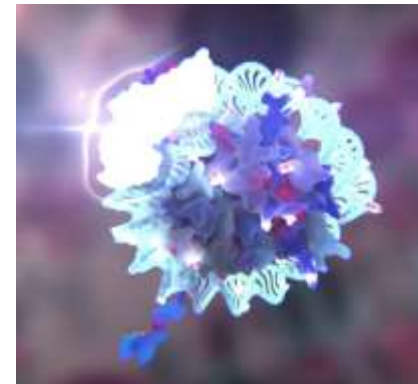
*Amino-acid changes
to the histone molecules*



*Chemical modifications
to the histone molecules*



Chemical modifications to the DNA



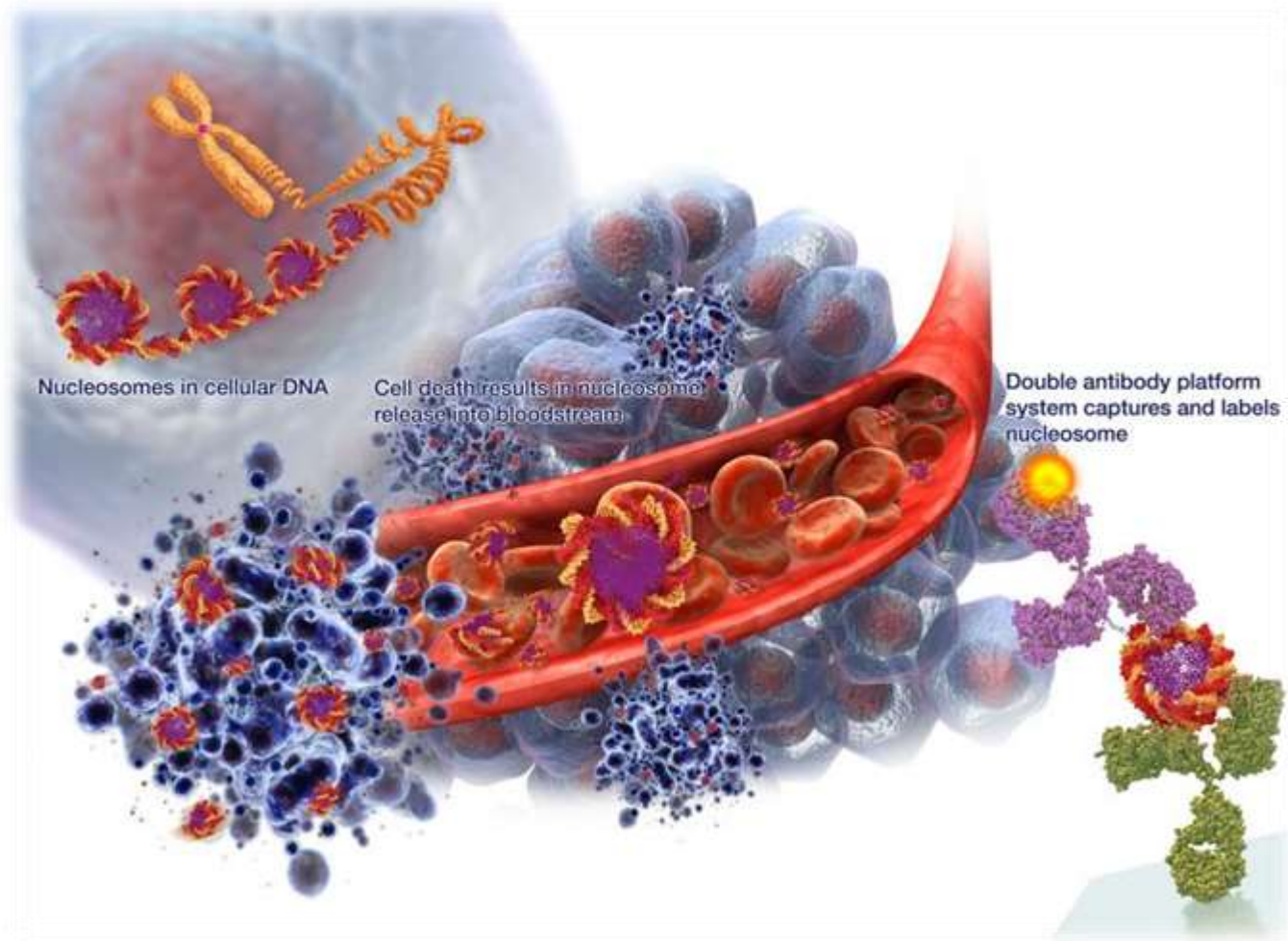
Complex with other chromosome proteins

VolitionRx : already successful

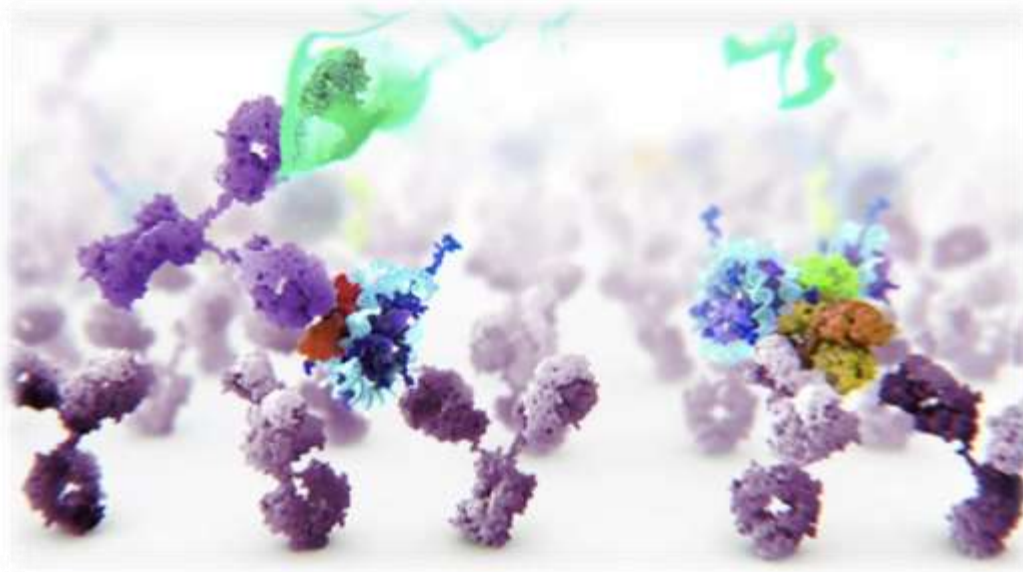


Cancer type	Detection	Specificity
Colorectal cancer & pre-cancerous colorectal adenomas	81%	78%
Pancreatic cancer	95%	84%
Lung cancer	91%	93%
Idiopathic Pulmonary Fibrosis	86%	80%

Development of NuQ® assays



Development of NuQ® assays



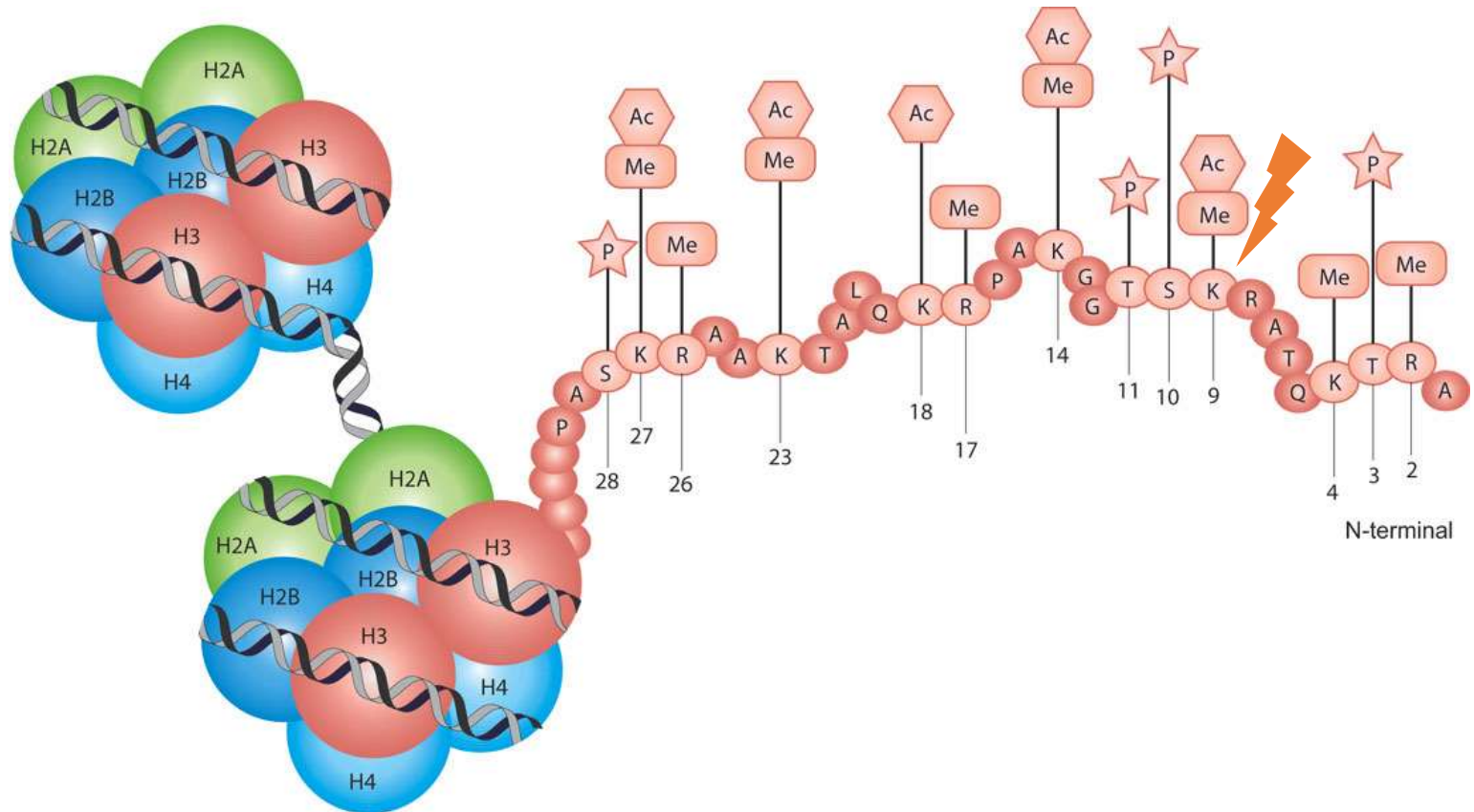
HRP reporter

Profiling Antibody

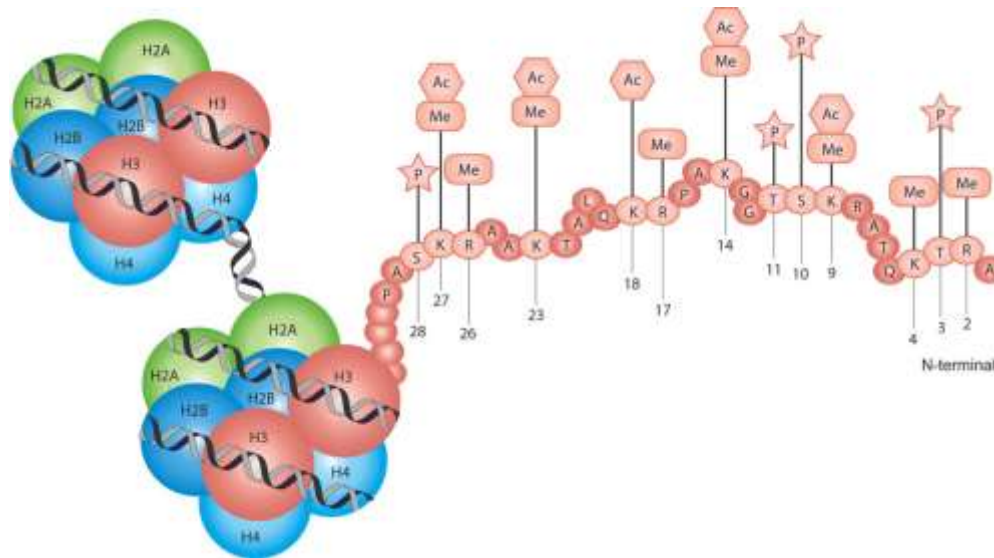
Nucleosome

Capture Antibody

Development of NuQ® assays



Development of NuQ® assays



H3_HUMAN MARTKQTARKSTGGKAPRKQLATKAARKSAPATGGVKKPHRYRPGTVALREIRRYQKSTE 60
H3_MOUSE MARTKQTARKSTGGKAPRKQLATKAARKSAPATGGVKKPHRYRPGTVALREIRRYQKSTE 60

H3_HUMAN LLIRKLPFQRLVREIAQDFKTDLRFQSSAVMALQEACEAYLVGLFEDTNLCAIHAKRVTI 120
H3_MOUSE LLIRKLPFQRLVREIAQDFKTDLRFQSSAVMALQEASEAYLVGLFEDTNLCAIHAKRVTI 120

H3_HUMAN MPKDIQLARRIRGERA 136
H3_MOUSE MPKDIQLARRIRGERA 136

Immunization with 16 aa peptides



Success is on the cards!

- A highly specific mAb to PTM Histone
- A unique mAb on the market
- A company which can enjoy renewed success

« We chose to launch one 'hard' program with SynAbs in order to develop an anti-PTM antibody. Indeed, there is no existing available monoclonal antibody for that given modification as of today.

We are delighted with the collaboration with Synabs!

We got a purified antibody with a high specificity to the very methyl group !

They know what they are talking about and have considerable experience with antibody production. They are also very flexible and the communication flow is efficient as well. As this program is a success, we will initiate new ones shortly. »

Gaetan Michel, VolitionRx, CEO

Why SynAbs?

- **Recognized expertise** : H. Bazin work
- **Optimized and efficient protocols** for immunizing rats, fusions, screening hybridomas, and delivering hybridoma (cell lines)
- **Customizable offer** at any step
- **Full service integration** : whole set of services for initial antigen preparation, subsequent antibody production and purification
- **Alternatives to mouse model at affordable costs** to increase the success of your projects

They believed us from the very beginning



The
University
Of
Sheffield.

