

Structural Biology Platform at Nuvisan

Protein Structure Determination, Cryo-electron Microscopy,
HT X-ray & NMR Spectroscopy

NUVISAN
The Science CRO

Nuvisan, Muellerstrasse 178, 13353 Berlin

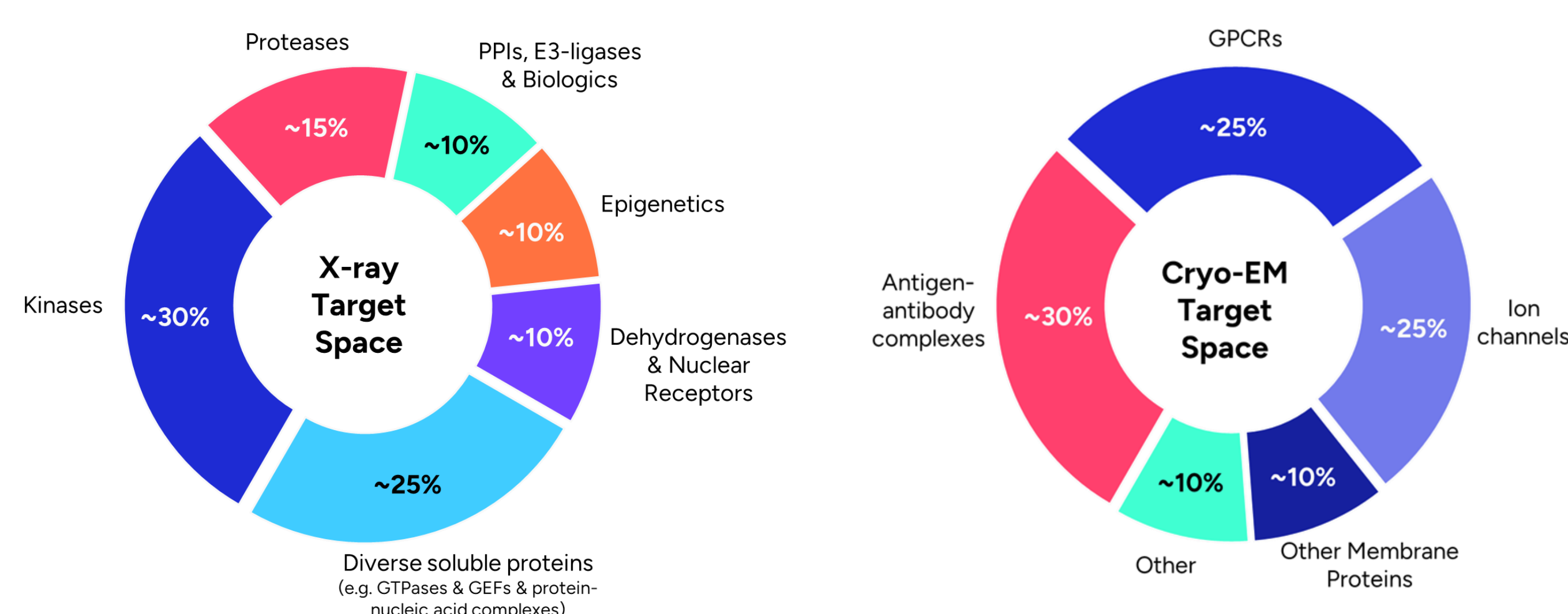
nuvisan.com

Enabling structure-based drug discovery

- The NUVISAN **structural biology** team has >20 years experience supporting drug discovery with timely, high-quality 3D-structural data
- **State-of-the-art gene-to-structure** platform enables structure-based drug discovery for a **broad range of target classes**
- **In-depth binding mode analysis & close interaction with design teams** to maximise learning from the structural data and to drive **rational design** of improved molecules

Tailored structural biology services

- **Establishment of high-quality and robust platforms:** Support rapid cycle times
- **On-site protein science team:** Produces **high-quality soluble and membrane proteins** suitable for structural biology experiments
- **Diverse target classes:** Experienced with various target classes, including **single- and multi-domain soluble proteins, membrane proteins, multi-subunit protein-protein and protein-nucleic acid complexes, biologic antibody-antigen targets and virus-like particles**



Typical projects

- **De-novo** structural determination
- Optimisation of **literature targets** for industrial drug-discovery
- Proprietary **Xrays2Go**

X-ray platform

- **Liquid-handling systems** for preparation of broad panel of proprietary and vendor crystallisation screens
- **Nanolitre liquid-handling machines** for accurate drop setting of protein samples including specialized **membrane protein lipidic cubic phase (LCP) platform**
- **Automated imaging systems** (visible and UV) at 4°C and 20°C
- **Bi-weekly synchrotron access** (third-generation high-brilliance)



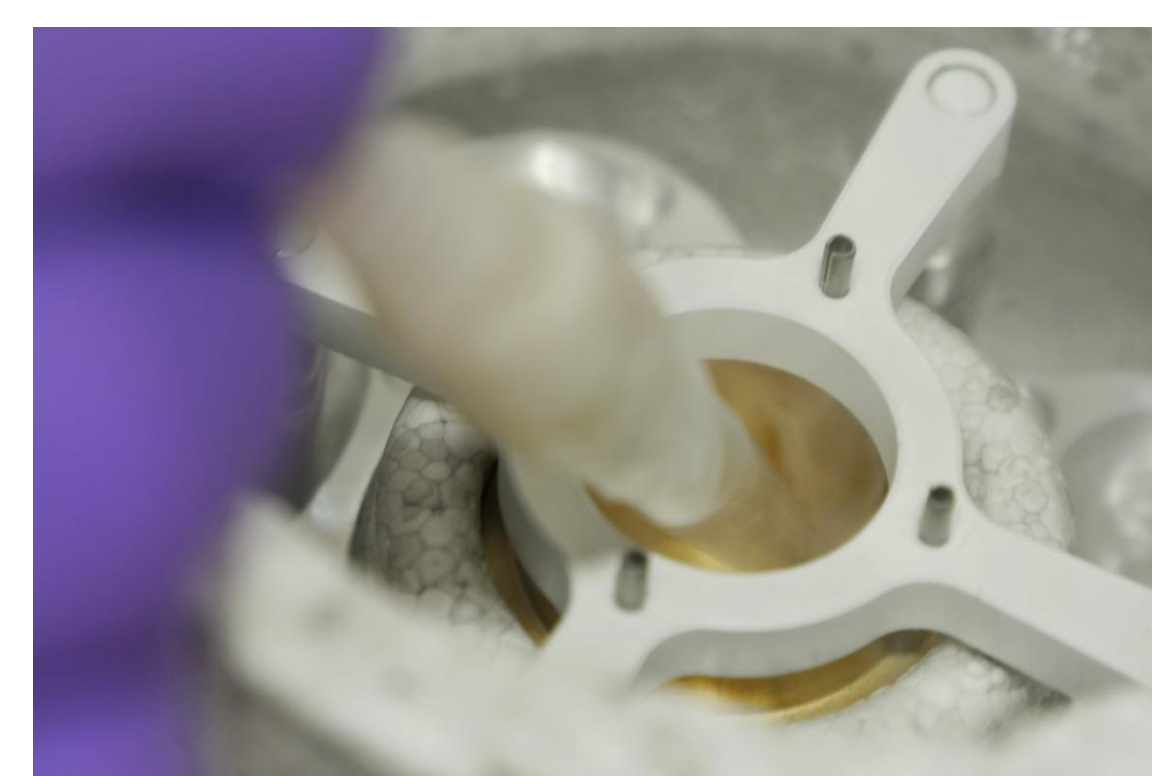
High-Throughput X-ray fragment screening (HTX)

- **Strong track record** developing **HTX-suitable platforms** for a **broad range of targets**
- **HTX workflow:** fully integrated into our structural biology platform enabling fast and efficient screening of **Nuvisan 1K fragment library**
- **HTX Pipeline:** **Echo acoustic dispenser** soaking, crystal freezing using **Crystal Shifter** and **proprietary parallelised data analysis pipeline** including PanDDA



Cryo-Electron Microscopy

- **Industry-tailored cryo-EM solutions**
- Enable **challenging targets** with **fresh-is-best** approach and **on-site grid preparation**
- **High-end microscopes & latest software** packages deliver high-resolution target-ligand structures
- Routine delivery of **high-resolution protein-ligand data** for diverse targets including **small membrane proteins**



NMR Spectroscopy

- **On-site NMR platform**, including isotopically labelled protein production, supports a range of biophysical drug-discovery activities
- Confirmation of **target engagement** – various protein- and ligand-observed methods implemented
- **Characterisation of chemical matter**, via affinity measurements, MoA studies, binding site analysis etc.
- **Fragment-screening** – of Nuvisan or other fragment collections



➤ **Interested in structural biology support tailored to your project needs?**
Have a look at our established and ready-to-go crystallisation systems

Nuvisan
Muellerstrasse 178
13353 Berlin
Germany
hello@nuvisan.com

