

E3 Ligase + Linkers
E3 Ligase Linkers

PROTAC ToolboxTM
100+ building blocks

o2h discovery has a customisable "off-the-shelf"

PROTAC Toolbox™ consisting diverse set of linkers, E3 ligase ligands and functionalised E3 ligand-linker compounds to JUMPSTART design, synthesis and testing/screening novel Protein Degraders.

Targeted Protein Degradation (TPD)

promisingly offers a novel way to eliminate toxic or diseaseassociated targets from cells. New medicines are being developed that leverage the cell's intrinsic destruction machinery (ubiquitin-proteasome system), enabling them to surmount many of the conventional obstacles encountered in drug discovery. This empowering approach holds the potential to unlock fresh treatment avenues for a wide range of diseases that currently lack effective therapeutic solutions.

PROTACs have remarkable therapeutic potential, offering an opportunity for extended pharmacodynamic effects, enhanced potency, and engagement with proteins previously deemed "Undruggable". These novel heterobifunctional small molecules consist of an E3 ligase ligand connected by a chemical linker to a binding moiety tailored for the intended protein of interest. This strategic design enables ubiquitination and degradation of the target protein via proteasome.

o2h discovery's TPD Experience

At o2h, we have extensive experience and expertise in the design, synthesis and purification of PROTACs acquired over number of years by working on a various Protein Degradation collaborations. The o2h PROTAC Toolbox™ allows us to build and test molecules quickly and efficiently using off-the-shelf molecules building-blocks. Novel and complex PROTAC molecules can be accessed by engaging our well established and experienced discovery and custom synthesis team. Our investment in analytical and biological capabilities and our expertise to support the synthesis and delivery of high quality PROTAC molecules is ingrained in our PROTAC delivery model.

Key Offerings

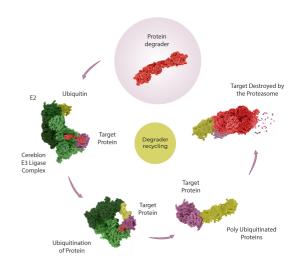
- o2h PROTAC Toolbox[™] of 100+ different off-the-shelf building blocks with various phys-chem properties for quick and efficient PROTAC assembly and discovery
- A range of personalized, cutting-edge PROTAC design and synthetic services to optimise the profile of your degrader molecule
- Analytical expertise and customizable solutions to isolate and purify every PROTAC compounds
- Dedicated lab in Cambridge, UK, where degraders can be further characterized for biological activity and cell permeability



"We've worked with o2h for a long time now as partners, and I particularly pick out their Protac expertise in synthesis, purification, and also testing the stability of Protacs once they've been made."

-Julian Blagg, Executive VP, Drug Discovery





PROTAC - Biology Expertise

o2h biologists have many years of experience in basic and applied research, with a proven track record of working with "me too" and "undruggable" class of targets. This coupled with a good understanding of potency to efficacy translation, we can provide an integrated suite of high-quality biophysical, biochemical & cellular-assay platforms and in delivering an optimal solution in the evaluation of targeted protein degraders. We can support in addressing the following questions:

- Q. Is my target degraded?
- Q. Do they form a ternary complex?
- Q. Are they soluble and cell permeable?
- Q. What's the phenotypic consequence of target degradation?

o2h PROTAC Toolbox™

Our customisable o2h PROTAC Toolbox[™] kit of 100+building blocks includes:

- Different VHL and Lenalidomide derivatives E3 Ligase ligands (with different vectors and functional groups);
- Different bi-functionalised linkers of different sizes and shape (Alkyl, PEG, cyclic) with different phys-chem properties;
- A selected combination of the above already connected E3 Ligase ligands and linkers.

The quick assembly of PROTAC molecules aims to provide you with a quick tool to evaluate a range of solutions that will help proof and de-risk your protein degradation approach.

Jump-start your Targeted Protein Degradation program. Get in touch with us to discover the full extent of o2h PROTAC Toolbox[™].

Get a Quote:



