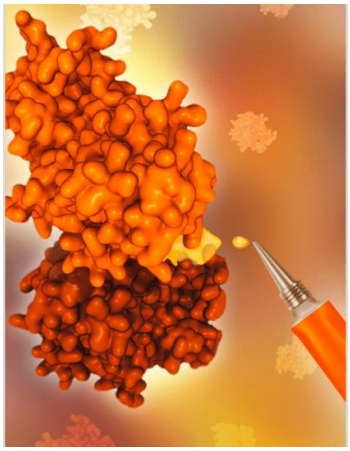
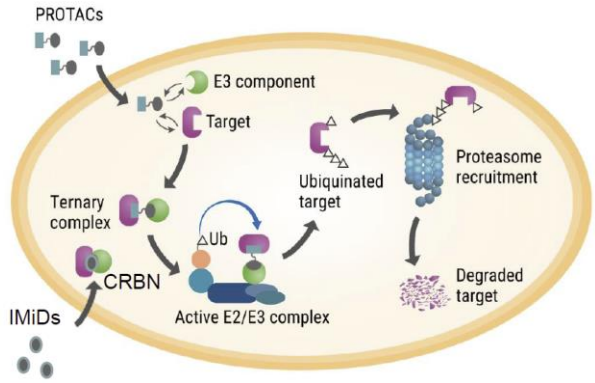


Targeted Protein Degrader (TPD) Discovery and Development Platforms and Services

Targeted Protein Degraders (TPDs) comprise a class of small molecules that induce protein degradation of a specific disease-causing protein by exploiting cellular endogenous ubiquitin-proteasome and autophagy–lysosome pathway system. In recent years, various molecule classes have evolved, including PROTACs (Proteolysis-targeting Chimeras), molecular glues, CHAMP (Chaperone-mediated Protein Degradation/Degrader), LYTAC (Lysosome-targeting Chimeras), to name a few.

PROTACs and other TPDs offer a fast and reversible chemical knock-down approach to control protein function. The impact of TPDs has changed the landscape of drug innovation. TPDs are emerging as a new therapeutic method to treat diseases such as cancer, inflammation or neurodegenerative disorders caused by the aberrant expression of a pathogenic protein. While traditional drugs can target only around 20% of the proteome, this new technology could reach the remaining 80% which is currently undruggable in terms of conventional methods, such as inhibitors and agonist/antagonists.



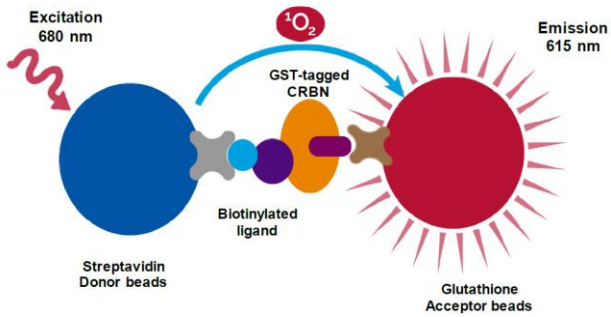
PROTAC and molecular glues cause protein degradation

TPD discovery technology platforms at **PicoImmune** laboratories covers a variety of target protein ligands. In addition, PicoImmune has established the TPD biological screening and testing platforms throughout the pre-clinical stages.

| **622 NJ- 10, Whippany, NJ 07981** | **TEL: 862.812.7093** | **email: info@picoimmune.com** | **min samples; max insight!**

PicoImmune is confident in providing efficient, cost-effective, and professional services to support our clients to successfully reach their drug development milestones.

Browse our solutions for Targeted Protein Degrader Drug discovery, TPD service offerings and connect with our specialists at picoImmune.com; or email to: info@picoimmune.com.



AlphaLISA for CRBN binding

Our Assay platforms

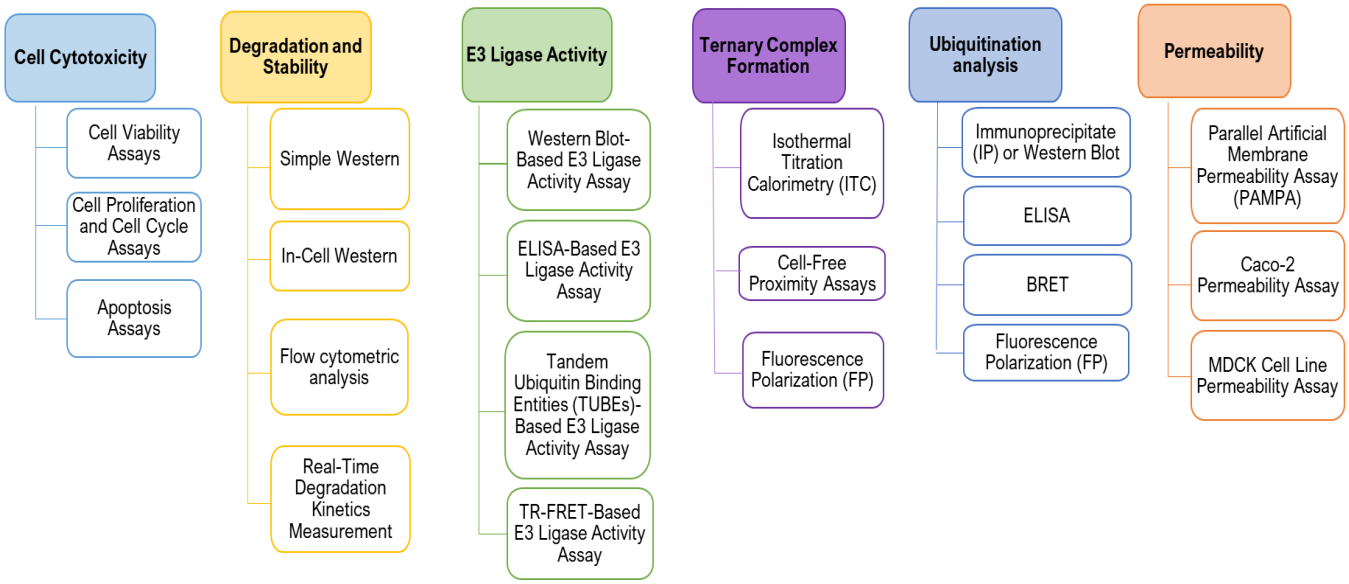
- Traditional **Western Blot** (SDS-PAGE based, Li-COR Imaging)
- Quantitative **Simple Western** to Quantify Degradation of Any Protein
- **In-Cell Western** to Quantify Degradation of Any Protein
- **AlphaLISA** or HTRF Human CRBN Binding Assay
- AlphaLISA or HTRF Human VHL Binding Assay
- **HTRF** xIAP BIR3 Binding Assay
- HTRF MDM2 Binding Assay
- HTRF cIAP1 Binding Assay
- HTRF cIAP1 Binding Assay
- Live Cell **NanoBRET** Target Engagement Intracellular E3 Ligase Assays
- Live Cell NanoBRET Ubiquitination Kinetics with PROTACs and Glues
- **UbiQuant** S ELISA and AlphaLISA assays for measuring protein ubiquitylation
- **IHC Analysis** of Protein Degradation in Tumor Tissues
- High-Throughput **Flow Cytometry**
- **RPPA** (Reverse Phase Protein Array for 500 protein targets)
- Cellular **Thermal Shift Assay** (Cetsa)
- Cell **Permeability** Efficacy Assay (PAMPA, Caco-2, MDCK cells)

Our Advantages

- Multiple technology platforms to choose from for each project
- Customers can formulate suitable assay scheme through discussion with our experts
- High-throughput analysis and live cell analysis of degrader activity
- Highly reliable and reproducible results; and short turn-around time
- >2 decades of experience in Molecular Glues: our scientists first published the critical role of CRBN in IMiDs efficacy for lymphoma. (https://doi.org/10.1111/bjh.12172; https://doi.org/10.1111/bjh.12708)

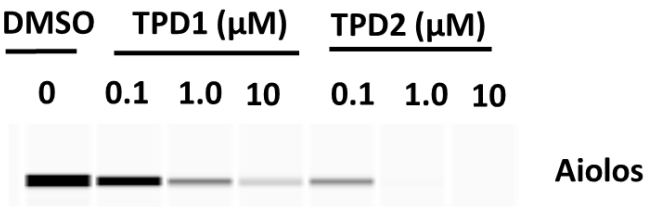
| **622 NJ- 10, Whippany, NJ 07981** | **TEL: 862.812.7093** | **email: info@picoimmune.com** | **min samples; max insight!**

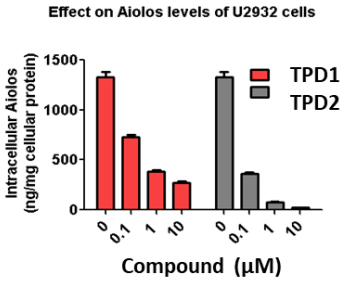
Assays we offer for screening and characterization of TPDs

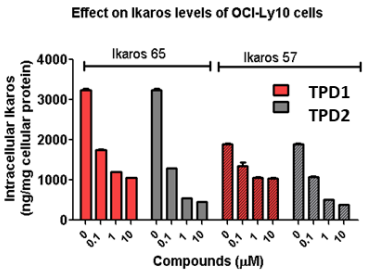


Data examples

Example 1: Simple Western to quantify IKZF1/3 degradation in human lymphoma cells treated with a **molecular glue** compound

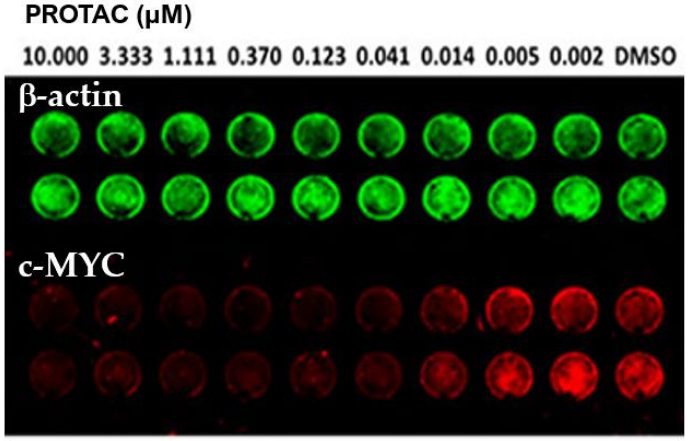




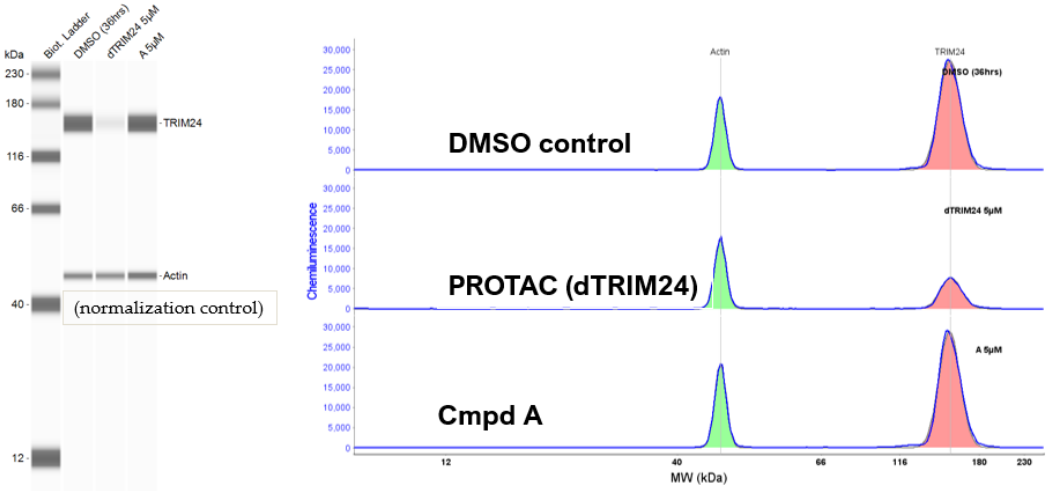


| 622 NJ- 10, Whippany, NJ 07981 | TEL: 862.812.7093 | email: info@picoimmune.com | min samples; max insight!

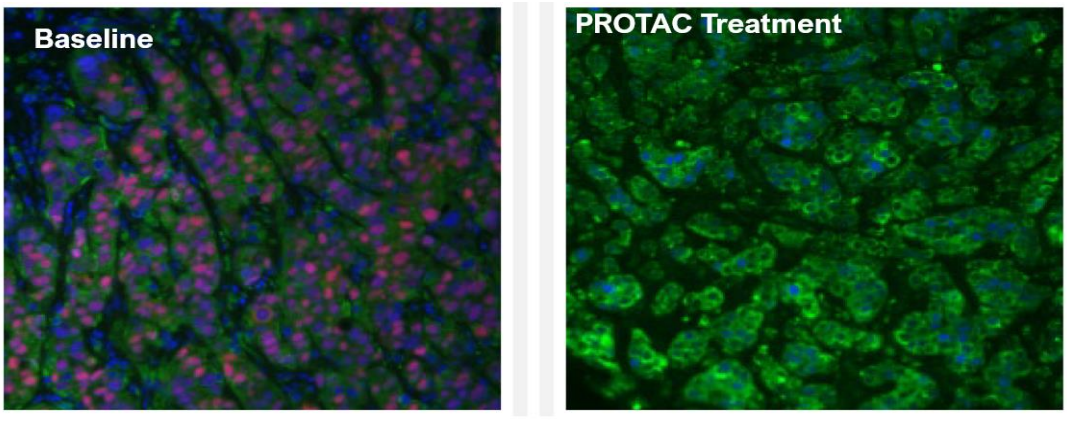
Example 2: In-Cell Western to quantify c-MYC degradation in MV-4-11 leukemia cells treated with a PROTAC compound



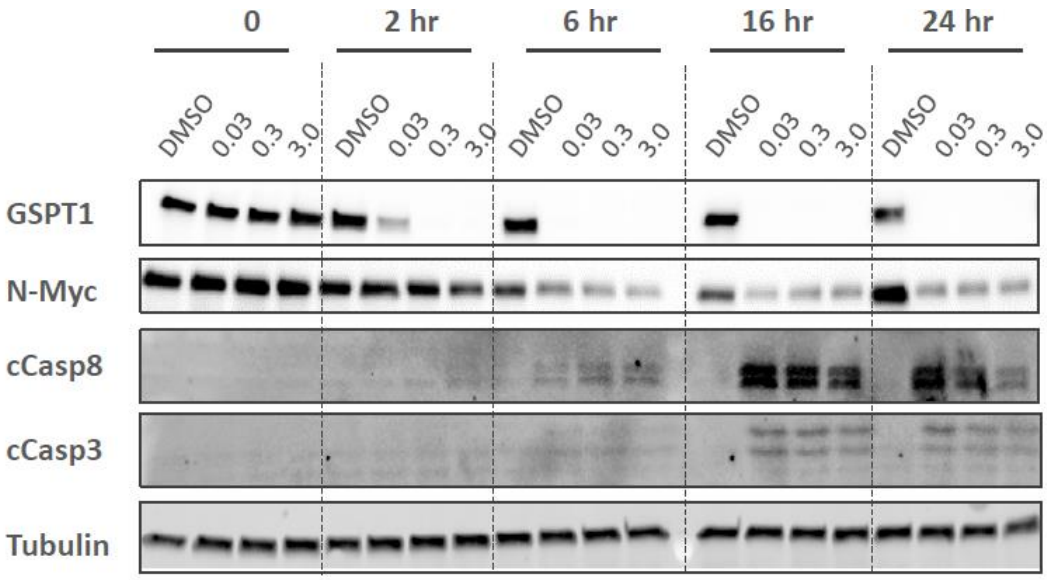
Example 3: Simple Western to quantify TRIM24 degradation in MCF-7 human breast cancer cells treated with a PROTAC compound



Example 4: IHC staining of protein degradation in tumors from a xenograft model



Example 5: Traditional western blot to examine time kinetics of GSPT1 degradation and caspase activation in cancer cells treated with a molecular glue compound



Example 6: Simple Western to quantify SALL4 and PLZF degradation in induced pluripotent stem cells (iPSCs) treated with a CRBN-binding molecular glue compounds. SALL4 and PLZF are two thalidomide-dependent cereblon neo-substrates and may be related to drug-induced teratogenicity.