

Protein degraders (PROTACs, molecular glues, destabilizers, etc.) represent a class of drug modalities that eliminate proteins by directing them to the cell's protein degradation system. Recently, protein degraders have garnered significant attention in drug development due to several advantages over traditional small molecular inhibitors, including the ability to target "undruggable" proteins, a catalytic mechanism of action, and high potency.

UBPBio specializes in the ubiquitin system and has served the ubiquitin community since 2011. Our RELAY^{TR} FRET platform utilizes an in-house-developed lanthanide ligand capable of binding both terbium and europium, with strong absorption in the 320–340 nm range. Commonly used donor/acceptor pairs include terbium/fluorescein and europium/Cy5.

Reagent Development

We provide covalent labeling of proteins, antibodies, peptides, or other biomolecules containing free thiol or amine groups using terbium or europium chelate, fluorescein, Cy5, biotin, or custom dyes. Following labeling, unreacted modifiers are removed by gel filtration or other methods, and the degree of labeling (DOL) is calculated for quality control.

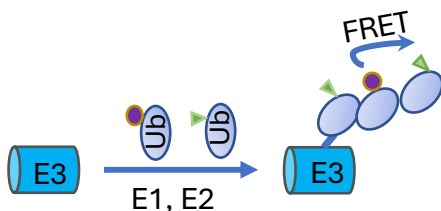
Assay Development and Execution

We design and optimize high-throughput assay formats with a focus on low signal interference, robust assay stability, high sensitivity and reproducibility, and cost effective. Established assay can be transferred to customer or being conducted in our laboratory for downstream experiments.

Partner with us to facilitate your degrader drug discovery.

Exemplary RELAY^{TR}-FRET assays

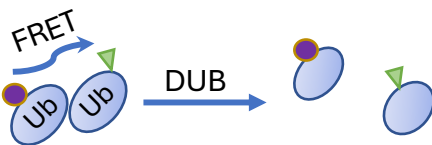
I) E3 autoubiquitination



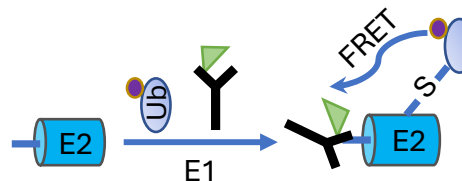
II) Protein ubiquitination



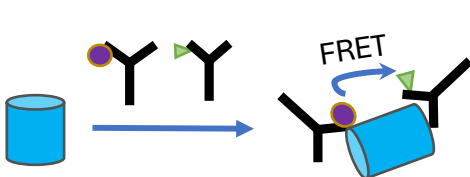
III) Deubiquitinase profiling



IV) E2 profiling (E2-Ub charging assay)



V) Protein quantification



VI) protein/protein interaction

