M. REYNDERS, B. S. MATSUURA, M. BÉROUTI, D. SIMONESCHI, A. MARZIO, M. PAGANO*, D. TRAUNER* (NEW YORK UNIVERSITY, USA)

PHOTACs Enable Optical Control of Protein Degradation
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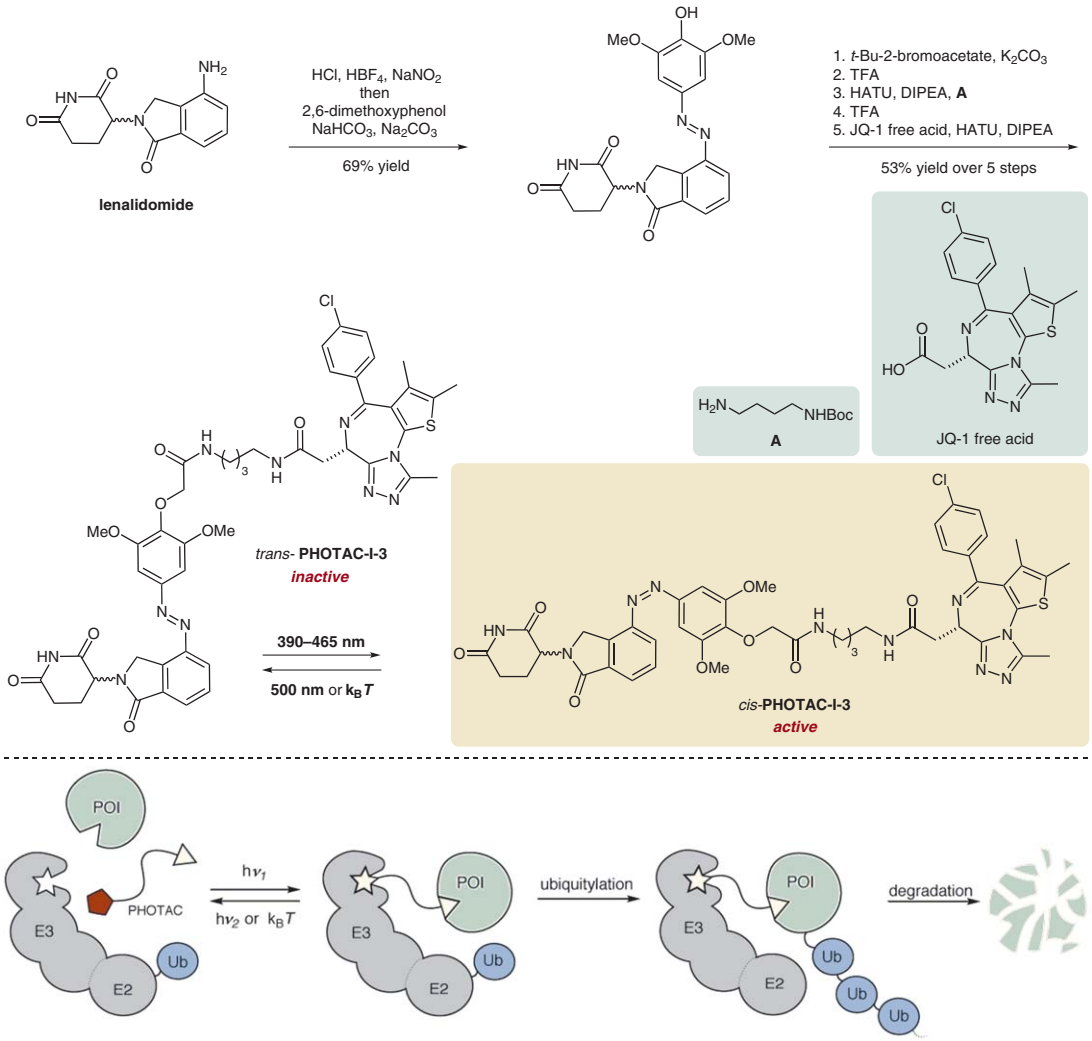
PHOTACs Enable Optical Control of Protein Degradation



Significance: PROTACs (PROteolysis TArgeting Chimeras) have emerged as a new modality in pharmacology (Sakamoto et al. PNAS **2001**, *98*, 8554), but their catalytic mechanism of action poses risks. PHOTACs (PHOtochemically TArgeting Chimeras) can be spatiotemporally controlled for precise and reversible switching between active and inactive states using light.

Comment: Based on a photoswitchable analog of the cereblon ligand thalidomide, this approach provides a general method to turn PROTACs into PHOTACs, which are active only upon irradiation. The authors use this strategy for the targeted degradation of BRD2/3/4 and FKBP12.

SYNFACTS Contributors: Dirk Trauner, Christopher J. Arp
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Synfact of the Month

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