Astinova AI Platform — PROTAC Design Report

Target: BRD4 (public) · warhead–linker–E3 ligand design for targeted degradation

Illustrative sample on a public target/compound — for format demonstration.

Degrader design components

Component	Choice (class)	Rationale
Target warhead	BET bromodomain binder (public chemotype)	Engages BRD4 BD1/BD2
E3 ligand	VHL ligand (hydroxyproline class)	Well-characterised, ternary-complex friendly
Alt. E3 ligand	CRBN ligand (glutarimide class)	Oral-friendly alternative; compare degradation
Linker set	PEG2–PEG5 and short alkyl/rigid variants	Scan length/rigidity for ternary optimisation

Enumerated linkers (illustrative)

Series	Linker	Predicted property window
L1	PEG2	compact; may limit ternary geometry
L2	PEG3	balanced length; first-wave make
L3	PEG4	longer reach; flexible
L4	rigid piperazine–alkyl	conformationally constrained; selectivity probe

Design pairs a public BET warhead with VHL / CRBN E3 ligands across a linker matrix to optimise ternary-complex formation and degradation. Candidates require synthesis and degradation (DC50/Dmax) testing; ternary modelling guides linker choice.