



## Non-Confidential Technology Disclosure

- Title:** Spirolactam and related targeting compounds
- Investigator:** Stephen Miller, Ph.D., Department of Biochemistry and Molecular Pharmacology, University of Massachusetts Medical School
- Description:** This invention describes a novel tetracysteine (TC) peptide tag created by Dr. Stephen Miller, called SplAsH (SPirolactam ArSenical Hairpin binder). Unlike currently available tags (SNAP-Tag sold by Covalys, HaloTag sold by Promega, and TC-FIAsH/TC-ReAsH sold by Invitrogen) SplAsH is small and capable of being labeled by a broad array of fluorescent molecules. Furthermore, the SplAsH targeting strategy overcomes current limitations with TC peptide tags in that it is more photostable, has a longer-wavelength emission, and brighter fluorescence.
- Application:** This invention may be utilized for:
- Fluorescent imaging of proteins with small molecules in vitro.
  - Labeling proteins in living cells.
- Advantage:** This invention improves upon current commercially available products by permitting the labeling of the very small TC peptide tag with a much broader array of fluorophores, allowing the use of dyes with much greater resistance to photobleaching, longer-wavelength emission, and brighter fluorescence.
- Patent Status:** Patent pending
- Licensing Status:** Available to license
- Docket:** UMMC 07-17
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