

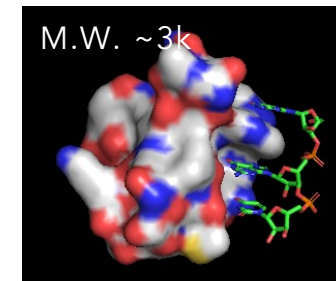
Support for Startup Ecosystem Formation

Adoption year: FY 2022 Principal Investigator: The University of Tokyo/Research Associate /Kei ENDO (As of Aug.2022)

Subject of Research **Tiny protein therapeutics**

Overview

RNA molecules are attractive drug targets because the discovery of disease-causing abnormal RNAs has accelerated in recent years, and because any gene is expressed via mRNA. In this project, we will develop tiny RNA-binding proteins (M.W.: <10 kDa) as a new therapeutic option that targets RNA.



Business Models(when applying)

We aim to establish a drug discovery startup that develops tiny RNA-binding proteins based on an original platform technology to detect RNA-protein interactions and conducts (1) pipeline drug discovery, (2) joint research and development, and (3) licensing business covering preclinical and clinical trials up to around Phase 2.

Activity Planning(when applying)

We are launching two pipeline drug discovery projects and will conduct R&D in following stages with identifying difficulties and improving our platform technology.

Lead generation: Tiny RNA-binding proteins that specifically bind to single-stranded RNA will be generated by genetic and evolutionary engineering methods based on our original platform technology.

Lead optimization: Peptides to be added to the lead protein and to enhance the efficacy of lead protein will be developed to determine the sequence of therapeutic proteins.

