

shRNA multiplexing is a unique capability where multiple genes can be modulated simultaneously. Modulation allows to target essential functional genes or genes whose expression is required to a certain extent, which are more difficult to achieve with gene editing

Benefits include:

- Ability to optimize CAR T cell features, persistence, efficacy, or ability to evade complex or immunosuppressive tumor microenvironments by modulating genes involved in alloreactivity, allorejection, fratricide, T-cell persistence and/or immunosuppression
- **Regulating the expression of multiple proteins at the same time**
- Provides potential for broad therapeutic functionality, which is especially important in the context of solid tumors
- Complementary to our All-in-One Vector approach to express multiple shRNAs in a **single construct within a single transduction step**

