LONG NON-CODING RNAS (LNCRNAS) AS THERAPEUTIC TARGETS IN GLIOMA

Tech ID: 33130 / UC Case 2019-001-0

TECHNOLOGY DESCRIPTION

LncRNAs exhibit high specificity to target tissues and cells, which may help to reduce toxic effects associated with cancer therapy. LncRNAs can be successfully targeted with antisense oligonucleotides (ASOs) to represent a new class of targets for tumor therapy.

UCSF researchers have developed a radiation modifier screen using CRISPRi to identify specific lncRNAs that sensitize glioma cells to radiotherapy. The invention also comprises methods for generating a human brain organoid model of malignant glioma.

ADVANTAGES

· Potential to:

o increase efficacy of radiation therapy, a key adjunctive cancer therapy

o selectively inhibit glioma cell growth via lncRNA knockdown without toxicity to normal brain cells

APPLICATION

· Method of treating malignant glioma and/or inhibiting growth / proliferation of glioma cells

· Enhancement of radiation therapy efficacy

· Method of screening therapeutic agents / radiotherapy sensitizers

LOOKING FOR PARTNERS

To commercialize the technology

STAGE OF DEVELOPMENT

Proof of concept

RELATED MATERIALS

▶ Compositions and Methods of Treating Glioma - 04/11/2023

CONTACT

Hailey Zhang

hailey.zhang@ucsf.edu

tel: .

OTHER INFORMATION

KEYWORDS

lncRNA, long non-coding RNA, glioma, antisense oligonucleotide, ASO, radiation therapy

CATEGORIZED AS

▶ Medical

▶ Disease: Cancer

▶ Screening

▶ Therapeutics

RELATED CASES

2019-001-0

DATA AVAILABILITY

Available under CDA

PATENT STATUS

Patent Pending

ADDRESS

UCSF

Innovation Ventures

600 16th St, Genentech Hall, S-272,

San Francisco,CA 94158

CONTACT

Tel:

innovation@ucsf.edu

https://innovation.ucsf.edu

Fax: