

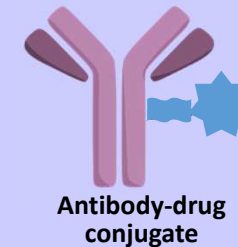
Antibody Drug Targeting Brain Tumor, Dementia, and Neuralgia

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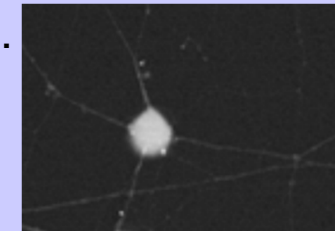
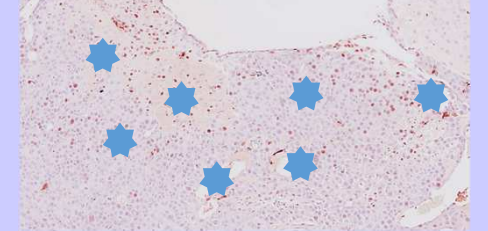
Research Area

Background: Five year survival rate of cancer patient is on the rise, but brain metastasis decreases QOL of cancer survivors. As the population ages, dementia has been recognized as social problem. Our original antibodies may be useful in addressing these challenges, because they have very high affinity to nerves.

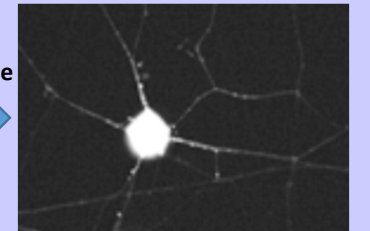
1. Optimization of linker structure for ideal drug release
2. Actual proof of drug delivery to the brain
3. Verification of drug efficacy to brain tumor and neuralgia



Drug delivery and cell death induction in brain tumor (TUNEL method)



Impulse



Nerve firing in vitro by mechanical stress: Can our antibody suppress it?

Recent Activities

- Elevated hydrostatic pressure causes retinal degeneration through upregulating lipocalin-2. Yoneshige *et al*, Front Cell Dev Biol, 9:664327, 2021
- Cell adhesion molecule 1 contributes to cell survival in crowded epithelial monolayers. Hagiyaama *et al*, Int J Mol Sci, 21(11):4123, 2020