

flavivirus anti-E protein Ab 4G2. Cells were next

Introduction	Results	Learning Objectives
Zika virus (ZIKV) is a flavivirus that causes	We found that AxI expression varies amongst the	By the conclusion of this session, participants will
microcephalus by selectively targeting normal	cell lines screened from no- to high-	be able to: 1. Describe the conditions a virus
neural		needs to meet to be considered oncolytic; and 2.
	expression. Flow cytometry confirmed that ZIKV	Discuss the data that shows Zika virus
stem cells in the developing brain. This specificity	entry and infection only occurs in Axl-positive	oncotropism for glioblastoma progenitor cells is
is due to recentor mediated cell entry: the	cells We	mediated by the Axl receptor
tyrosine	further found that ZIKV infection of CDM	
		R428 inhibits Zika virus infection of glioblastoma
kinase receptor, Axi, present on neural stem	progenitor cells is inhibited by R428 in a dose-	progenitor cells
cells, binds ZIKV permitting cell entry and	dependent	GBM cells
subsequent		8035 2VIDAPITONSO 2VIDAPITONSO 2VIDAPITONSO 2VIDAPITONSO
	manner. Additionally, we found that blocking the	김 영화에 있는 수가가 가지 않는 것을 했다.
productive infection. Axl is a member of the TAM	Axl receptor using antibody significantly reduces	
family (Tyro3 Axl Mer) of tyrosine kinase	ZIKV	8049
receptors. Axl		
	entry.	
is also overexpressed in 60% of glioblastoma		
(GBM) We hypothesize that ZIKV similar to	Conclusions	
poliovirus can	Our results confirm our hypothesis that ZIKV	These are representative immunofluorescence images
	displays operations for GPM and this is	lines tested. For the controls (left column), no 7/ was
ha na ann an airte an an an tha time an a sifi a llu	displays oncollopism for GBM and this is	added to cell culture. The blue fluorescence is from the
be repurposed as an oncolytic virus specifically		DAPI nuclear stain. The middle column shows robust ZV
targeting GBM through the AxI receptor.	mediated by the Axl receptor. Therefore, the first	staining (green) 24 hours after ZV exposure. When R428
	condition in the development of ZIKV as an	is added prior to ZV exposure (right column), there is a
Methods	oncolytic	dramatic reduction in the number of cells that stain green
ZIKV strain MR766 was propagated in Vero cells.		for intracellular ZV.
Viral stock was titrated by plaque assays.	virus has been met.	[Default Poster]
Western blot was used to characterize Axl		
expression in five commercial GBM cell lines and		
11 patient		
derived GBM progenitor cell lines. Cell lines were		
infacted with ZIKV and the percentage of infacted		
Cells		
was quantified by flow cytometry using the pan-		