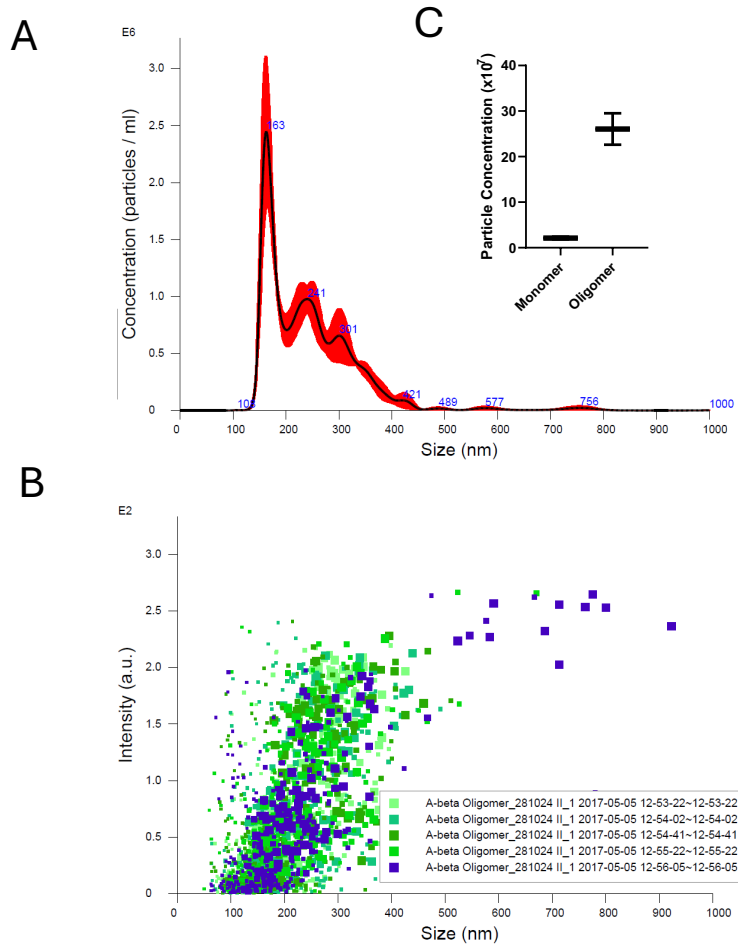


# Supplementary Information

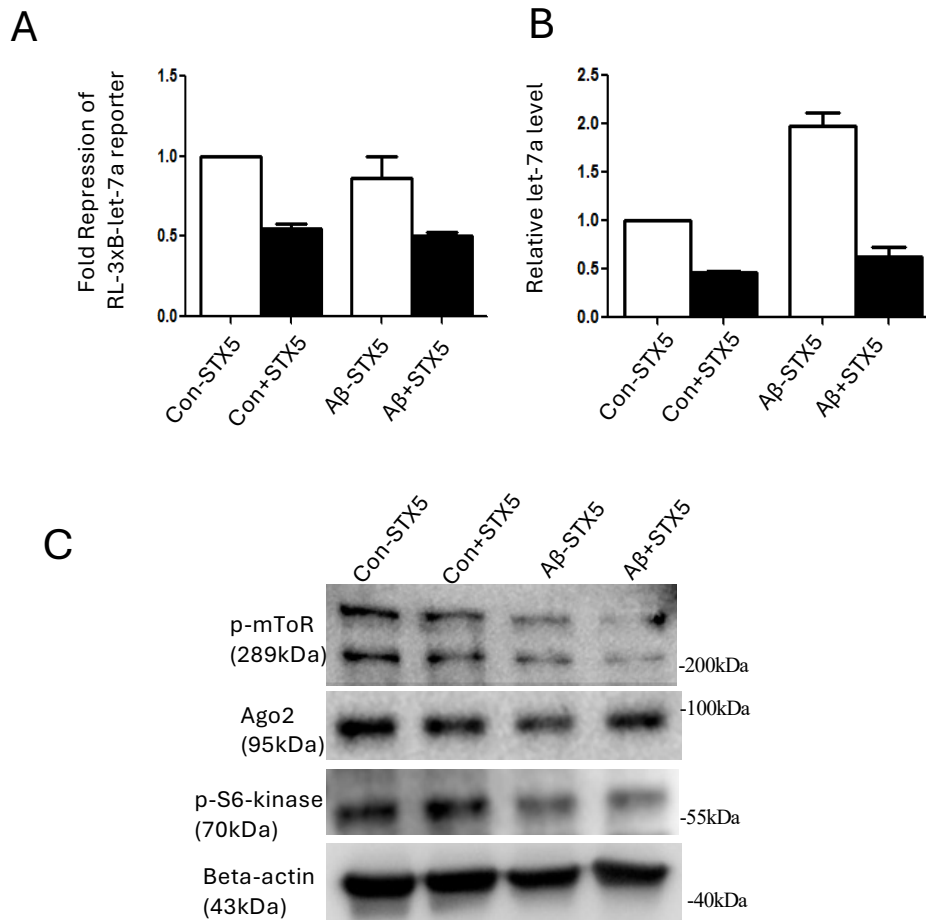
Fig.S1



**Fig S1. The NTA analysis of oligomers formed by Ab1-42 peptides during the oligomer formation reaction.**

(A-C) Monomers and oligomers are compared for particle concentration.

(B) Size vs Intensity plots were compared for multiple readings.



**Figure S2.** Effect of expression of FH-STX5 on miRNA levels and activity in control and amyloid-treated C6 glioblastoma cells. **(A-B)** The effect of 2.5mM amyloid beta (A $\beta$ )<sub>1-42</sub> oligomers on FH-STX5 expressing C6 rat glioblastoma cells. **(A)** A Luciferase-based reporter assay showed changes in the fold repression of let-7a in response to A $\beta$  treatment, A $\beta$  -treatment and FH-STX5 overexpression conditions ( $n \geq 2$  independent experiments). **(B)** qRT-PCR was done to check the cellular let-7a level. U6 level was taken as the normalization control. ( $n \geq 2$  independent experiments). **(C)** The effect of FH-STX5 on different cellular protein levels was measured in both control and A $\beta$ -treated C6 cells. Western blot images showed the change in the levels of Ago2, phospho-mTOR, phospho-S6-kinase and beta-actin was taken as the loading control. Data are presented as mean  $\pm$  SD.

**Supplementary Table 1: List of Plasmids**

<b>Name of plasmids</b>	<b>Reference/Source</b>	<b>Plasmid description</b>
pmiR-122	Received from Chang J.	Plasmid encoding pre-miR-122 under a constitutive U6 promoter
pmiR-146a	Kind gift of Dr. Susanta Roychoudhury	miR-146a expressing pU61 construct
HA-HuR	Kind gift of Witold Filipowicz	Full length HuR with HA coding sequence in pCI-neo vector
FLAG-HA-RalA	Constructed by cloning	RalA coding sequence was sub-cloned into FLAG-HA-Ago2 vector between the NotI and BamHI sites replacing Ago2. Flag and HA tag at the N-terminal of RalA.
FLAG-HA-STX5	Constructed by cloning	Stx5 coding sequence was sub-cloned into FLAG-HA-Ago2 vector between the NotI and BamHI sites replacing Ago2. Flag and HA tag at the N-terminal of STX5.
Endo-YFP	Kind gift from Edouard Bertrand	Yellow Fluorescent Protein (YFP) tagged early endosome expression plasmid
Rab5-CA	Kind gift from J. M. Backer.	A GTPase-deficient mutant of Rab5a, Rab5Q79L expression plasmid
pCI-neo	Promega	pCI-neo expressing vector
Rheb-Myc	Kind gift from J. M. Backer	Myc tagged human Rheb expression plasmid

**Supplementary Table 2: Details of miRNA primers used for Taqman based quantification**

<b>Name</b>	<b>Assay ID</b>
miR-122	000445
miR-146a	000468
U6 SnRNA	001973

**Supplementary Table 3: Details of Antibodies used for western blot (WB), Immunofluorescence (IF) and immunoprecipitation (IP)**

Antibody Name	Raised in	Dilution	Source	Catalogue No.
Alix	Mouse	WB-1:100	Santa Cruz	sc53538
Calnexin	Rabbit	WB-1:10,000	Bethyl	A303-696A
HuR	Mouse	WB-1:1000	Santa Cruz	sc-5261 (3A2)
HA	Rat	WB-1:1000 IP- 1:100 IF:100	Roche	11867431001
$\beta$ -Actin	Mouse monoclonal (HRP-conjugated)	WB-1:10,000	Sigma Aldrich	A3854
c-Myc	Mouse	WB-1:500	Santa Cruz	Sc-40 (9E10)
Ra1A	Rabbit	WB-1:1000	Cell Signaling	#3526
Stx5	Rabbit	WB-1:10,000	Bethyl	A305-382A
Flotillin-1	Rabbit	WB-1:1000	Cell Signaling	#18634S

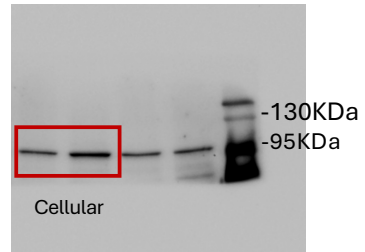
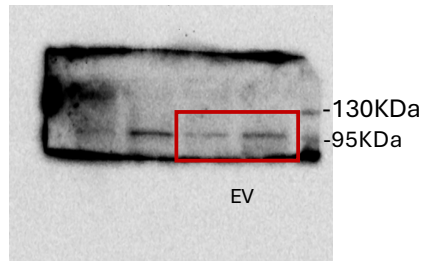
**Supplementary Table 4: List of secondary antibodies**

Item	Supplier	Catalogue No.	Dilution for WB	Dilution for IF
HRP Goat anti-rat	Invitrogen	62-9520	1:8000	-
HRP Goat anti-rabbit	Invitrogen	65-6120	1:8000	-
HRP Goat anti-mouse	Invitrogen	62-6520	1:8000	-
Alexa Fluor 568 (mouse)	Invitrogen	A11004	-	1:500
Alexa Fluor 488 (rat)	Invitrogen	A11006	-	1:500

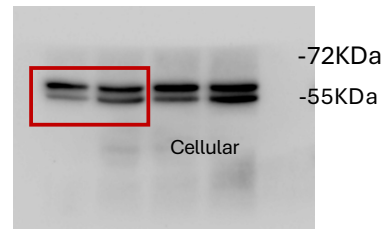
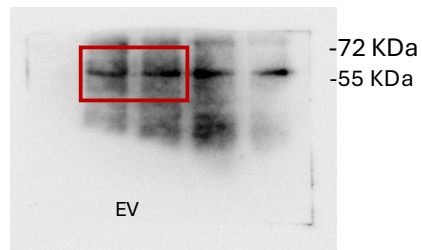
# Western Blots Raw Data

**Fig.1D**

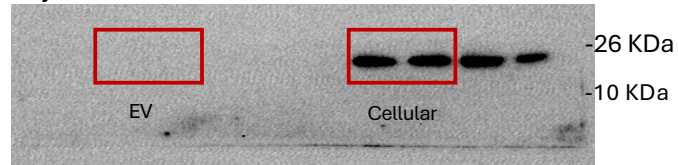
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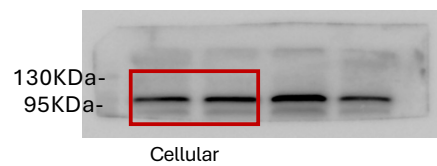
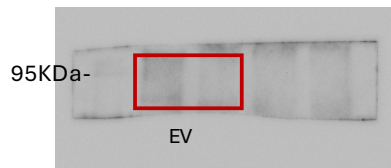
Flotillin-1



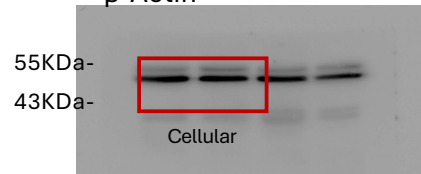
Cyto. C



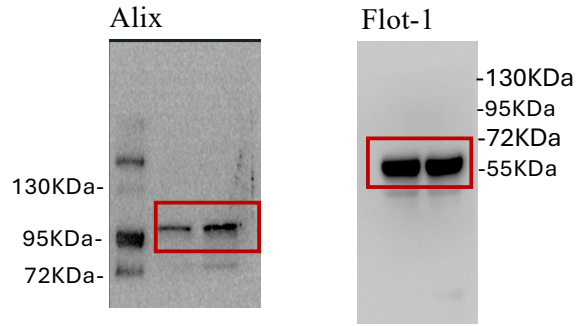
Calnexin



$\beta$ -Actin



**Fig.3C**



**Fig.3F**

