

Supplementary

Inhibition of Arachidonate 12/15-Lipoxygenase Improves α -Galactosidase Efficacy in iPSC-Derived Cardiomyocytes from Fabry Patients

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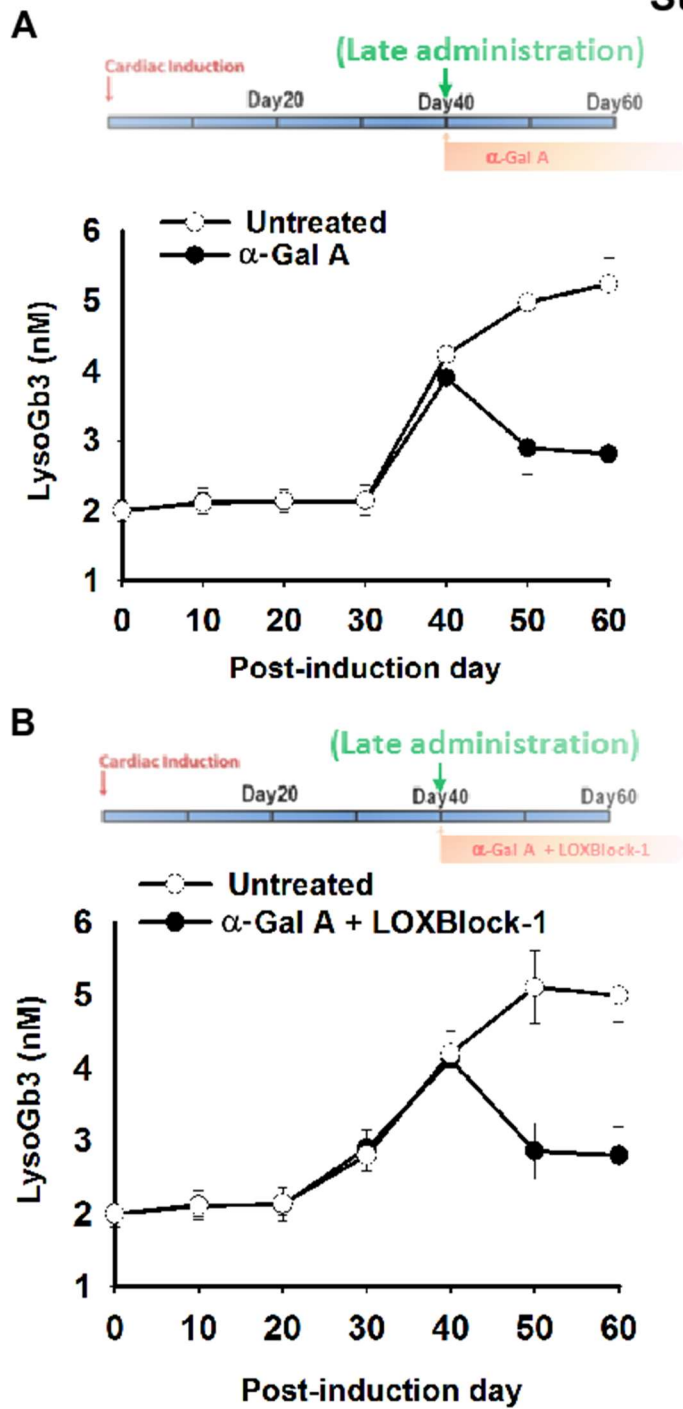
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Supplemental
Figure 1



Supplemental Figure 1. Effect of late administration of alpha galactosidase plus Alox12/15 pharmacological inhibitor on lysoGb3 release. LysoGb3 release from FC-iPSC-CMs receiving (A) late-administration of either alpha galactosidase alone or (B) a combination of GLA and LOXBlock-1, was measured.

Supplemental Table S1. List of RT-PCR primers

The sequences of the primers for quantitative RT-PCR			
Gene (Accession No.)	Primer Sequence (5' to 3')	Product size (bp)	T _m (°C)
hOCT4 NM_001159542.1	F: CTCAGGCACTGTGTTTCATTG R: TTTGGCTGAACACCTTCCCA	672	60
hSOX2 NM_003106.3	F:GCCCTGCAGTACAACCTCCAT R:TTCCTGCAAAGCTCCTACCG	735	60
hNANOG NM_024865.2	F:GAAGACAAGGTCCCGGTCAA R:GGATTCAGCCAGTGTCCAGA	709	60
REX1 NM_174900.3	F:GTGGGCCTTATGTGATGGCT R:TGCGTTAGGATGTGGGCTTT	759	60
hDPPA2 NM_138815.3	F:CCGTCCCCGCAATCTCCTTCCATC R:ATGATGCCAACATGGCTCCCGGTG	606	60
hDppa4 NM_018189.3	F:TAGCACAGCAAAGAGGCCA R:TGCATGGCCATAAACAGGT	635	60
hDppa5 NM_001025290.2	F:CGGCACGTAGACATATCCCG R:GGCTTCATTGCATTGGCTGG	366	60
hGDF3 NM_020634.1	F:GTTTGTGTTGCGGTCAGTCC R:TTGGTGGGGATACACACAGC	501	60
hGAPDH NM_002046.5	F:GTCGCCAGCCGAGCCACATC R:CCAGGCGCCCAATACGACCA	83	60
hANF NM_006172.3	F:GCCTAGGGACAGACTGCAAG R:GGCGAGGAAGTCACCATCAA	170	60
hACTA1 NM_001100.3	F:CAGGGCGTCATGGTCGGT R:GTGCCAGATCTTCTCCATGTCATC	141	60
hMYL2 NM_000432.3	F:CTCATCTCTCTCCCCGAGT R:TGGAACATGGCCTCTGGATG	161	60
hMYL7 NM_021223.2	F:GGAGTTCAAAGAAGCCTTCAGC R:CTCCTCTGGGACACTCACCT	112	60

Supplemental Table S2. List of proteins tested by antibodies

Protein	Assay	Antibody	Origin	Dilution	Incubation period
GAPDH	WB	rpab	Ab9385, Abcam, Inc	1:5000	60 min
OCT3/4	IF	rpab	#2840, Cell Signaling, Inc	1:400	O.N.
NANOG	IF	rpab	#3580, Cell Signaling, Inc	1:800	O.N.
TRA 1-60	IF	mmab	#4746, Cell signaling, Inc	1:1000	O.N.
TRA 1-81	IF	mmab	#4745, Cell Signaling, Inc	1:1000	O.N.
SMA	IF	rpab	Ab52218, Abcam, Inc	1:500	O.N.
NF	IF	mmab	MAB1615, Millipore, Inc	1:200	O.N.
AFP	IF	mmab	#3903, Cell Signaling, Inc	1:100	O.N.
HNF3 β	IF	rpab	Sc-20692, Santa Cruz, Inc	1:200	O.N.
NESTIN	IF	rpab	ABD69, Millipore, Inc	1:500	O.N.
α -ACTININ	IF	mmab	Ab9465, Abcam, Inc	1:200	O.N.
MYL2	IF	rpab	Ab79935, Abcam, Inc	1:200	O.N.
MYL7	IF	mmab	Ab68086, Abcam, Inc	1:200	O.N.
cTNT	IF	mmab	Ab10214, Abcam, Inc	1:200	O.N.
GLA	WB	rpab	GTX101178, GeneTex, Inc	1:1000	60 min
Crystallin A3	WB	rpab	GTX109207, GeneTex, Inc	1:1000	60 min
Crystallin A4	WB	rpab	GTX109526, GeneTex, Inc	1:1000	60 min
ALOX12	WB, IF	rpab	PA5-26020, Thermo, Inc	1:1000, 1:200	60 min, O.N.
ALOX15	WB, IF	mmab	Ab119774, Abcam, Inc	1:200	60 min, O.N.
α -TUBULIN	IF	rpab	#5568, Cell Signaling, Inc	1:10000	60 min

Abbreviations: WB, Western blot; mmab, mouse monoclonal antibody; rpab, rabbit polyclonal antibody; IF, immunofluorescence; O.N.: over night.

