Curated Sets of iPSCs

*For more detailed cell line information, please see the iPSC Catalog

Table A. APOE Variants

Set Name	IUGB IDs	Notes
APOE Variants	IUGB16 IUGB32 IUGB40 IUGB43 IUGB45 IUGB406 IUGB72 IUGB344 IUGB355 IUGB364 IUGB517 IUGB183 IUGB377 IUGB438.1	Includes patient-derived lines that have APOE ε4/ε4 genotype

Table B. Lines with Patient-Derived Mutations

Set Name	IUGB IDs	Notes
PSEN2 Mutations	IUGB3 IUGB4	Includes patient-derived lines with pathogenic PSEN2 mutations
PSEN1 Mutations	IUGB259 IUGB260 IUGB416 IUGB422	Includes patient-derived lines with pathogenic PSEN1 mutations
Duplicate APP	IUGB61.1 IUGB61.2 IUGB61.3 IUGB62.1 IUGB62.2 IUGB62.3	Includes clones of patient-derived lines with pathogenic duplicate APP mutations
APP mutations	IUGB5 IUGB358	Includes patient-derived lines with pathogenic APP mutations

Table C. Isogenic Sets

Set Name	IUGB IDs	Notes
MAPT Isogenic Lines	21 lines	Includes patient-derived parental cell line containing pathogenic MAPT mutation, isogenic control, heterozygous and homozygous isogenic mutants
APP Isogenic Lines	13 lines	Includes patient-derived wild-type parental cell line, isogenic control, heterozygous and homozygous isogenic mutants
PSEN1 Isogenic Lines	6 lines	Includes an isogenic control, isogenic mutants, and the wild-type patient-derived parental line.
SORL1 Isogenic Lines	3 lines	Includes an isogenic control, an isogenic mutant, and the wild-type patient-derived parental line

Table D. Lines from Diverse Participants

Set Name	IUGB IDs	Notes
Hispanic ethnicity	IUGB58.2 IUGB58.3	Includes a set of two clones from a control* patient
Asian	IUGB30 IUGB33	Includes two lines from a control* patient
Black or African American	IUGB410.1 IUGB410.2 IUGB410.3	Includes a set of three clones from a control* patient
Native Hawaiian or Other Pacific Islander	IUGB43	One line from a patient with sporadic AD.

*Control is defined as a patient with no reported diagnosis of Alzheimer's disease or related dementia.

Table E. Study Specific Lines Banked at NCRAD

ADRC Sites	137 lines
ALLFTD	24 lines
LEADS	34 lines
ACT	5 lines
ADNI	42 lines

Detailed Tables

Links to PSEN2 Mutations in Table B.

Set Name	IUGB ID	Amino Acid Change	Notes
PSEN2 Mutations	IUGB3	N141I	Includes patient-derived lines with pathogenic PSEN2 mutations
	IUGB4	N141I	

Links to PSEN1 Mutations in Table B.

Set Name	IUGB ID	Amino Acid Change	Notes
PSEN1 Mutations	IUGB259	A246E	Includes patient-derived lines with pathogenic PSEN1 mutations
	IUGB260	A246E	
	IUGB416	H163R	
	IUGB422	L435F	

Links to Duplicate APP mutations in Table B.

Set Name	IUGB ID	Notes
Duplicate APP Mutation	IUGB61.1	1 patient, 3 clones containing patient-serifed pathogenic duplicate APP mutations.
	IUGB61.2	
	IUGB61.3	
	IUGB62.1	1 patient, 3 clones containing patient-serifed pathogenic duplicate APP mutations.
	IUGB62.2	
	IUGB62.3	

Links to APP Mutations in Table B.

Set Name	IUGB ID	Amino Acid Change	Notes
APP Mutations	IUGB5	V717I	Includes patient-derived lines with pathogenic APP mutations
	IUGB358	V717I	

Links to C9ORF72 mutations in Table B.

Set Name	IUGB ID	Notes
C9ORF72 Mutations	IUGB19	Includes patient-derived lines with pathogenic C9ORF72 mutations
	IUGB425	
	IUGB355	

MAPT Isogenic iPSCs (Links to MAPT isogenic lines in Table C)

IUGB ID	Mutation Status	Amino Acid Change	Notes
IUGB249.1-iso1	Isogenic Mutant	S305N	MAPT patient S305N heterozygote line edited to S305N homozygote.
IUGB249.1-iso3	Isogenic Mutant	V300V, S305N	MAPT patient S305N heterozygote line edited to S305N homozygote with V300V PAM site edit.
IUGB249.1-iso5	Isogenic Control	V300V, N305S	MAPT S305N patient line corrected to isogenic control. Includes homozygous PAM site V300V edit.
IUGB249.1-iso6	Isogenic Mutant	S305N, V300V	Heterozygous MAPT S305N patient line. Heterozygous V300V mutation in this line is the PAM site mutation used for CRISPR editing.
IUGB250.1-iso1	Isogenic Control	V300V, I305S	MAPT patient S305I heterozygous line corrected to control, with V300V PAM site edit.
IUGB250.1-iso2	Isogenic Control	I305S	MAPT patient S305I heterozygous line corrected to control.
IUGB250.1-iso3	Isogenic Control	I305S	MAPT patient S305I heterozygous line corrected to control.
IUGB250.1-iso4	Isogenic Mutant	V300V, S305I	MAPT patient S305I heterozygote line edited to S305I homozygote, with V300V PAM site edit.
IUGB250.1-iso6	Isogenic Mutant	V300V, S305I	MAPT patient S305I heterozygote line edited to S305I homozygote, with V300V PAM site edit.
IUGB250.1-iso7	Isogenic Control	I305S	MAPT patient S305I heterozygous line corrected to control.
IUGB249.1	Patient-Derived Mutation	S305N	Unedited MAPT patient S305N heterozygote.
IUGB249.2	Patient-Derived Mutation	S305N	Unedited MAPT patient S305N heterozygote.
IUGB249.3	Patient-Derived Mutation	S305N	Unedited MAPT patient S305N heterozygote.
IUGB249.1.2	Patient-Derived Mutation	S305N	MAPT patient S305N heterozygote. Unedited clonal control for CRISPR editing.
IUGB249.1.1	Patient-Derived Mutation	S305N	MAPT patient S305N heterozygote. Unedited clonal control for CRISPR editing.
IUGB250.1	Patient-Derived Mutation	S305I	Unedited MAPT patient S305I heterozygote.

(Continued)

IUGB ID	*Mutation Status*	*Amino Acid Change*	*Notes*
IUGB250.2	Patient-Derived Mutation	S305I	Unedited MAPT patient S305I heterozygote.
IUGB250.3	Patient-Derived Mutation	S305I	Unedited MAPT patient S305I heterozygote.
IUGB250.1.1	Patient-Derived Mutation	S305I	MAPT patient S305I heterozygote. Unedited clonal control for CRISPR editing.
IUGB250.1.2	Patient-Derived Mutation	S305I	MAPT patient S305I heterozygote. Unedited clonal control for CRISPR editing.
IUGB250.1.3	Patient-Derived Mutation	S305I	MAPT patient S305I heterozygote. Unedited clonal control for CRISPR editing.

APP Isogenic Lines
(Links to APP isogenic lines in Table C)

Sets	IUGB ID	Mutation Status	Amino Acid Change	Notes
Parent line	IUGB55.1	Control	N/A	
Isogenic control/ isogenic mutant set	IUGB55.1-iso1	Isogenic Control	N/A	It is an isogenic line that went through CRISPR editing of IUGB 55.1 but failed. It is WT/WT for the APP mutation
	IUGB55.1-iso2	Isogenic Mutant	F691A/E693A	
Isogenic mutant can be paired with the parent cell line to create a set.	IUGB55.1-iso9	Isogenic Mutant	A673T	This is an isogenic line derived from CRISPR-editing of IUGB 55.1 to introduce the Icelandic genetic variant in the APP gene: APP A673T.
Isogenic mutants can be paired with the parent cell line to create a set.	IUGB55.1-iso10	Isogenic Mutant	APP KO	
	IUGB55.1-iso11	Isogenic Mutant	APP KO	
This set contains several isogenic mutants, and an isogenic control.	IUGB55.1-iso12	Isogenic Control	N/A	It is an isogenic line derived from IUGB 55.1 that went through CRISPR editing process to introduce an APPswe mutation which failed. It is a WT/WT for the APP gene
	IUGB55.1-iso13	Isogenic Mutant	KM670/671NL	Heterozygous APPSwe/WT. CRISPR-control line is IUGB 55.1 [iso 12].
	IUGB55.1-iso14	Isogenic Mutant	KM670/671NL	Heterozygous APPSwe/WT. CRISPR-control line is IUGB 55.1 [iso 12] control line is IUGB 55.1 [iso 12].
	IUGB55.1-iso15	Isogenic Mutant	KM670/671NL	Homozygous APPSwe/swe. CRISPR-control line is IUGB 55.1 [iso 12].
	IUGB55.1-iso16	Isogenic Mutant	KM670/671NL	Homozygous APPSwe/swe. CRISPR-control line is IUGB 55.1 [iso 12].
Isogenic mutants can be paired with the parent cell line to create a set.	IUGB55.1-iso17	Isogenic Mutant	V717F	Heterozygous APP mutation-V717F/WT.
	IUGB55.1-iso18	Isogenic Mutant	V717F	Homozygous APP mutation-V717F/V717F.

PSEN1 Isogenic Lines
(Links to PSEN1 isogenic lines in Table C)

IUGB ID	Mutation Status	Amino Acid Change	Notes
IUGB55.1	Control	N/A	Parent cell line
IUGB55.1-iso3	Isogenic Mutant	S290C;T291_S319del	
IUGB55.1-iso4	Isogenic Mutant	S290C;T291_S319del	
IUGB55.1-iso5	Isogenic Mutant	S290C;T291_S319del	
IUGB55.1-iso6	Isogenic Mutant	S290C;T291_S319del	
IUGB55.1-iso8	Isogenic Control	N/A	This is a line derived from IUGB 55.1 that went through the TALEN editing process to introduce the PSEN1 deltaE9 mutation but it failed. This line is PSEN1 WT/WT.

SORL1 Isogenic iPSCs
(Links to SORL1 isogenic lines in Table C)

IUGB ID	Mutation Status	Amino Acid Change
IUGB55.3-iso2	Isogenic Mutant	premature stop in SORL1 gene
IUGB55.3	Control	N/A

Cell Lines from Diverse Individuals
(Links to Lines from Diverse Participants in Table D)

Ethnicity/ Race	IUGB ID	Diagnosis	Notes
Native Hawaiian or Other Pacific Islander	IUGB43	Case	One line from a patient with sporadic AD.
Asian	IUGB30	Control	
	IUGB33	Control	
Hispanic ethnicity	IUGB58.2	Control	One patient, two clones.
	IUGB58.3	Control	
Black or African American	IUGB410.1	Control	One patient, three clones.
	IUGB410.2	Control	
	IUGB410.3	Control	