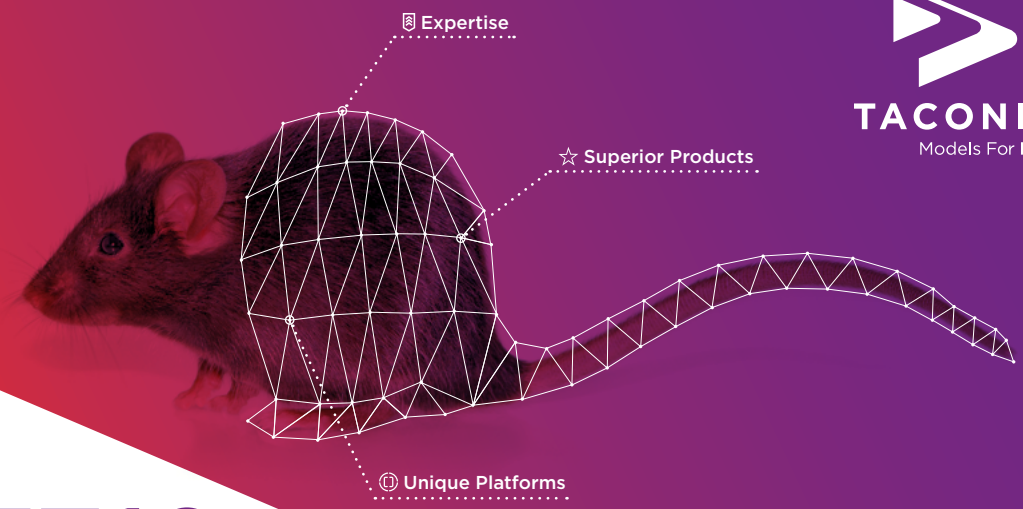
TACONIC
Models For **Life.**



ARTE10 (APP-PS1) Mouse

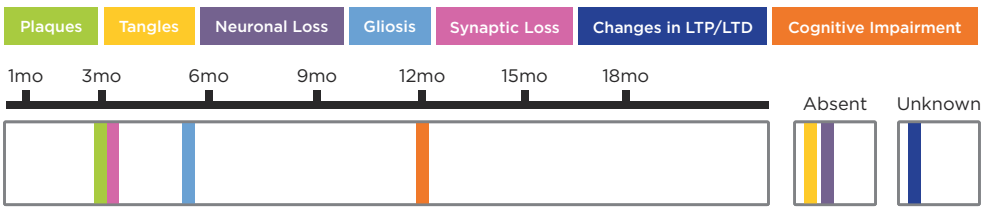
Now Available to Commercial, CRO, & Academic Researchers

- Available for the first time to commercial and academic researchers under easy access terms
  - No complex license agreement to sign and no license fees
  - Simple label license applies to per-head purchases
- The ARTE10 mouse model expresses mutant human versions of both APP and PS1 co-integrated under control of the Thy-1 promoter. It develops robust and early-onset neuropathology.
- ARTE10 is an appropriate preclinical model for:
  - Prolonged evaluation of amyloid-lowering or -modifying therapies
  - PET imaging — superior model for *in vivo* and *ex vivo* imaging with Pittsburgh Compound B (PiB) tracers
  - Amenable for robust electrophysiological studies
  - Age-associated cognitive deficits
  - Neuroinflammation (reactive gliosis surrounding amyloid plaques reported by Willuweit et. al, 2009)

ORDERING INFORMATION

Model Name	Model #	Nomenclature
ARTE10 (APP-PS1)	16347	B6.CBA-Tg(Thy1-PSEN1*M146V,-APP*Swe)10Arte

PHENOTYPIC TIMELINE



Phenotypic characterization diagram and descriptive excerpt from AlzForum (www.alzforum.org)

Get in touch for more information about our products and services.
US: 1-888-822-6642 | **EU:** +45 70 23 04 05 | **info@taconic.com** | Learn more at: **taconic.com/arte10**

THE COMPLETE SOLUTION

MODELS TO DRIVE DRUG DISCOVERY
Taconic Biosciences is uniquely positioned to enable drug discovery through animal models by being the only company that partners with customers to provide expertise, quality, and availability, along with downstream services.

- Expertise at every step
- Highest quality standards in the industry
- Availability and access to drive global research

MODEL GENERATION SOLUTIONS
Taconic's Model Generation Solutions empower our customers with a unique combination of capabilities, specifically tailored to each individual discovery program:

- Most experienced model generation and breeding company
- Most comprehensive toolkit
- Exclusive programs
- Concierge approach to partnering with customers

COLONY MANAGEMENT SOLUTIONS
Taconic's fully-integrated colony management solutions bring innovative models from design to study-ready cohorts with unprecedented speed and transparency:

- Most experienced model generation and colony management company
- The complete toolkit
- Colony management solution process
- Partnering with our customers
- Expanded applications and opportunities

YOUR PARTNER

WHAT WE DO
Taconic Biosciences is a fully-licensed, global leader in genetically engineered rodent models and services. Founded in 1952, Taconic provides the best animal solutions so that customers can acquire, custom-generate, breed, precondition, test, and distribute valuable research models worldwide.

WHO WE ARE
Taconic has created a unique ecosystem of experts to provide our customers with the best animal model solutions. Whether it is choosing the right model for your study, designing a custom model, creating an efficient breeding plan, or providing expertise in critical support functions like veterinary science, genetics, and embryology; Taconic is ready to help you drive your research from idea to cure.

CONTACT US
To get started, contact one of our customer service team members. Contact us at **info@taconic.com**.

VISIT TACONIC.COM
There is so much more to learn. Visit taconic.com. to see our full breadth of animal model solutions and valuable resources.

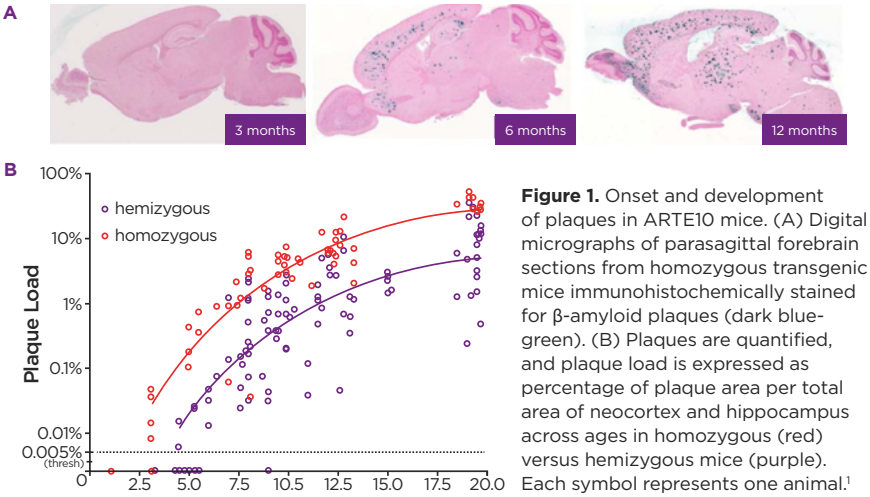


Figure 1. Onset and development of plaques in ARTE10 mice. (A) Digital micrographs of parasagittal forebrain sections from homozygous transgenic mice immunohistochemically stained for β-amyloid plaques (dark blue-green). (B) Plaques are quantified, and plaque load is expressed as percentage of plaque area per total area of neocortex and hippocampus across ages in homozygous (red) versus hemizygous mice (purple). Each symbol represents one animal.[1]

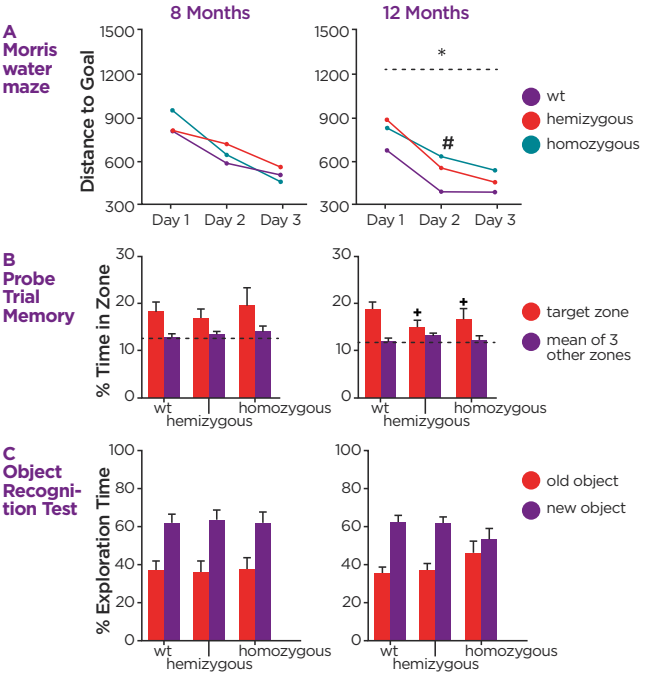


Figure 2. Behavioral deficits in ARTE10 mice. (A) Longitudinal study of Morris water maze as well as cross-sectional (B) probe memory trial for the platform location and (C) object recognition tests on ARTE10 mice. (A) Each data point represents the mean of 6 trials per animal. (*) p = 0.0407 between groups over days (repeated measures ANOVA); (#) wt v/s tg/tg, p = 0.0154 (unpaired t-test) (B and C) Data are expressed as means + SEM. Dotted lines represent chance levels (12.5%). (+) indicates <=12.5%. ($) indicates <= 50%.[1]

Study group	Olfactory system	Telencephalon	Diencephalon & Midbrain
Homozygous at 9 months	1.27 ± 0.24 (*)	1.87 ± 0.58 (*** #)	1.79 ± 0.57 (#)
Homozygous at 21 months	1.90 ± 0.22 (*)	4.23 ± 0.46 (*** $)	2.22 ± 0.47 ($)
Control B6 at 9 months	0.87 ± 0.23	0.82 ± 0.09	1.10 ± 0.17
Control B6 at 21 months		0.67 ± 0.12	1.11 ± 0.13

Table 1. Regional brain biodistribution of PET radioligand [11C]PiB. Results show mean [11C]PiB uptake ratios (± SD) of the three target regions relative to cerebellum for the homozygous study groups and both control groups. Two-sided t-tests with unequal variances where * and *** represents p< 0.05 and p < 0.001 between homozygous animals of 9 and 21 months respectively, # represents p < 0.05 between young homozygous and control animals at 9 months, and $ represents P < 0.05 between old homozygous and control animals at 9 months. Table adapted from Reference 2.

1 Willuweit A.; Velden J.; Godemann R.; Manook A.; Jetzek F.; Tintrup H.; Kauselmann G.; Zevnik B.; Henriksen G.; Drzezga A.; Pohlner J.; Schoor M.; Kemp J.A.; von der Kammer H. (2009) *Early-Onset and Robust Amyloid Pathology in a New Homozygous Mouse Model of Alzheimer's Disease*. PLoS ONE. 4 (11), e7931.

2 Manook A, Yousefi BH, Willuweit A, Platzer S, Reder S, Voss A, Huisman M, Settles M, Neff F, Velden J, Schoor M, von der Kammer H, Wester HJ, Schwaiger M, Henriksen G, Drzezga A. *Small-animal PET imaging of amyloid-beta plaques with [11C]PiB and its multi-modal validation in an APP/PS1 mouse model of Alzheimer's disease*. PLoS One. 2012;7(3):e31310.