

Transgenic HD Minipig (TgHD, PIGMOD Center)

<https://www.neurodegenerationresearch.eu/survey/transgenic-hd-minipig-tghd-pigmod-center/>

Name of Resource

Transgenic HD Minipig (TgHD, PIGMOD Center)

Name of Principal Investigator - Title

Prof

Name of Principal Investigator - First name

Jan

Name of Principal Investigator - Last name

Motlik

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Institute of Animal Physiology and Genetics-PIGMOD Center

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Address of institution - City

Liběchov

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27721

Country

Czech Republic

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Contact email

Summary

At present, we are probably the only facility to be breeding TgHD minipigs. We have four

generations, around 180 animals. The animals are being studied for phenotype development, and also first preclinical testing with a pharmaceutical company Uniqure is being done. We hope to attract more companies for testing their therapeutic treatment on this unique large animal model for Huntington's disease. Funded by CHDI, Czech-Norwegian Research Programme 7F14308, National Programme of Sustainability LO1609

Q1a. Please indicate below if your cohort includes or expects to include, incidence of the following conditions? (1)

Huntington's disease

Q1b. Does your resource hold

Animals| Other - animal-derived embryonic neural stem cells

Q2a. Does the resource act as a centre for access and distribution to external groups (who are not the Principal Investigators (PI) for the resource)?

Yes

Q2b. If Yes, what procedures and rules apply for access?

Apply to PI or co-ordinator at resource|Access through collaboration with PI only|International access

Q3a. Does your resource develop experimental models (animal/cell) for external groups?

Yes

Q3b. If YES and your resource is related to an ANIMAL model, what types of models are provided?

Under MTA with CHDI

Q3c. If YES and your resource is related to a CELL model, what types of models are provided?

Other - TgHD and control animal derived

Q4a. Is this activity supported as:

A collaboration

**Q4b. Do you deposit what you supply in any kind of central repository?
Disease**

HD

Species

Minipigs

Available to external user

Yes

Full phenotypic character

Male fertility failure at 13 months, At two years: fragmentation of Htt in brain, and testes, neuroinflammation, decrease in total creatine in thalamus, At two years: fragmentation of Htt in brain, and testes, neuroinflammation, decrease in total creatine in thalamus, At four years: mitochondria impairment in heart and muscles, At five years: starting biobehavioral and motoric problems based on three available pairs at this age

Please indicate the phenotypes

Four generations of minipigs with N-terminal part of human mutated (128Q,523AA)HTT expressed under the human promoter at chromosome 1 (1q24-q25) of porcine DNA and their wild type sibling.

List of genotypes or other subtypes

Q5b. Cognitive function, No of models

Q5b. Cognitive function, Available to external users

Q5b. Cognitive function, Full phenotypic characterisation

Q5b. Cognitive function, Nature of phenotype

Q5b. Motor function, No of models

Q5b. Motor function, Available to external users

Q5b. Motor function, Full phenotypic characterisation

Q5b. Motor function, Nature of phenotype

Q5b. Physiological function, no of models

Q5b. Physiological function, Available to external users

Q5b. Physiological function, Full phenotypic characterisation

Q5b. Physiological function, Nature of phenotype

Q5b. Other function (please specify), no of models

Please specify other function

Q5b. Other function (please specify), Available to external users

Q5b. Other function (please specify), Full phenotypic characterisation

Q5b. Other function (please specify), Nature of phenotype

Q6. Please indicate if your resource is already linked into European or international consortia or networks?

Q7a. Is maintenance of this resource dependent on continued funding?

Yes

Q7b. If yes, when does the current funding period end?

2020

Q7c. What is the expected lifespan of the resource (in years)?

15-20

Q7d. Are there other plans affecting future use that it may be useful to know?

Types:

Experimental Models

Member States:

Czech Republic

Diseases:

N/A

Years:

2016

Database Categories:

N/A

Database Tags:

N/A