YORKAPIG-HF-RBM20 SWINE- rbm20 bglii restriction fragment length polymorphism (rflp) positive for one or two copies of rbm20-r636s not applicable Recombinetics, Inc.

YorkaPig-HF-RBM20 Swine

Identity: Transcription activator-like effector nuclease (TALEN) edit and homology dependent repair in Yorkshire breed porcine fetal fibroblasts to introduce a C>A base substitution at base pair 121,244,982 that generates a BgIII restriction enzyme site used to genotype progeny from gene edited founders, a CG>TC base substitution at base pairs 121,244,988-121,244,989 that creates a coding sequence change from arginine to serine at amino acid 638 of the swine RBM20 protein, and a synonymous AG>TC base substitution at base pairs 121,244,991-121,244,992.

Claim: Loss of RBM20 gene function as a result of this gene edit in the Yorkshire breed of swine produces symptoms consistent with the criteria for diagnosis of familial dilated cardiomyopathy disease in humans.

Limitations: This is a model of progressive disease. Some of the disease symptoms associated with familial dilated cardiomyopathy disease in humans take time to develop, and like the human disease, are variable in presentation from animal to animal.

Product Use: Model animals and/or materials derived from these animals are intended for purchase only under license agreement with Recombinetics, Inc., and solely for use in connection with the specific licensed biomedical research.

Conditions of Use: This model animal and any products derived from it are for biomedical research purposes only and not for use in humans. This is an investigational animal. Edible products of investigational animals are not to be used for food unless authorization has been granted by the U.S. Food and Drug Administration or by the U.S. Department of Agriculture.

WARNINGS & PRECAUTIONS:

Caution. This intentionally genetically altered animal and any products derived from it are for biomedical

research purposes only and are not for use in humans or as human or animal food.

YorkaPig-HF-RBM20 animals are not for resale. No reproduction, distribution, transportation, or other third

party transfer is allowed by the purchaser unless specifically agreed to in writing by Recombinetics, Inc.

YorkaPig-HF-RBM20 animals, or any materials derived from the YorkaPig-HF-RBM20 animals, are not intended

to enter the human or animal food supply.

YorkaPig-HF-RBM20 animals shall be euthanized in accordance with all applicable regulatory or industry

standards, and all animal remains must be disposed of by incineration. Purchaser must maintain detailed records accounting for the location of all YorkaPig-HF-RBM20 animals, and all materials derived from the

YorkaPig-HF-RBM20 animals, from the time the animals are delivered to Purchaser through disposition by

incineration. Final disposition notification must be made to Recombinetics, Inc.



YorkaPig-HF-RBM20 Miniature Swine



al Identification	Sec. 10.10.10.10.10.11	
otch ID	Birth Date	
ng ID	Dam ID	
	Boar ID	

Genotype: RBM20 Bgill restriction fragment length polymorphism (RFLP) Positive for one or two copies of RBM20 Intelligence (RBM20 Intelligence Intelligence

Certificate of Animal Health & Identification

Pedigree Description:

Pre-Shipment Veterinary Health Status Reviewed On:

WARNINGS & PRECAUTIONS

Caution. This intentionally genetically altered animal and any products derived from it are for biomedical research purposes only and are not for use in humans or as human or animal food.

YorkaPig-HF-RBM20 animals are not for resale. No reproduction, distribution, transportation, or other third party transfer is allowed by the purchaser unless specifically agreed to in writing by Recombinetics, Inc.

YorkaPig-HF-R8M20 animals, or any materials derived from the YorkaPig-HF-R8M20 animals, are not intended to enter the human or animal food supply.

YorkaPig-HF-RBM20 animals shall be euthanized in accordance with all applicable regulatory or industry standards, and all animal remains must be disposed of by incineration. Purchaser must maintain detailed records accounting for the location of all Yorkang-HF-RBM20 animals, and all materials derived from the YorkaPig-HF-RBM20 animals, and all materials derived from the YorkaPig-HF-RBM20 animals, and all materials derived from the YorkaPig-HF-RBM20 animals, and Big-HF-RBM20 animals, and the YorkaPig-HF-RBM20 animals. The YorkaPig-HF-RBM20 animals will be younged to the YorkaPig-HF-RBM20 animals and YorkaPig-HF-RBM20 animals. The YorkaPig-HF-RBM20 animals are delivered to Purchaser through disposition by incineration. Final disposition notification must be made to Recombination, Inc.

YorkaPig-HF-RBM20 Ministure Swine (Sus scrofa g./NC_010456.5)121244982C-A + 121244988-121244989CG>TC + 121244991-121244992AG>TC in Yorkshire breed large white swine Surrogen

YorkaPig-HF-RBM20 Miniature Swine



Identity: Transcription activator-like effector nuclease (TALEN) edit and homology dependent repair in Yorkshire breed procine fetal fibroblasts to introduce a CAB base substitution at base pair 121,244,982 that generates a BgIII restriction ensyme site used to genotype progeny from gene edited founders, a CGD-TC base substitution at base pairs 121,244,989-121,244,989 that creates a coding sequence change from arginine to serine at amino acid 638 of the swine RBM20 protein, and a synonymous AGD-TC base substitution at base pairs 121,244,991-121,244,992.

Claim: Loss of RBM20 gene function as a result of this gene edit in the Yorkshire breed of swine produces symptoms consistent with the criteria for diagnosis of familial dilated cardiomyopathy disease in humans

Limitations: This is a model of progressive disease. Some of the disease symptoms associated with familial dilated cardiomyosphathy disease in humans take time to develop, and like the human disease, are variable in presentation from animal to animal.

Product Use: Model animals and/or materials derived from these animals are intended for purchase only under license agreement with Recombinetics, Inc., and solely for use in connection with the specific licenses the model of the second.

Conditions of Use: This model animal and any products derived from it are for biomedical research purposes only and not for use in humans. This is an investigational animal. Edibie products of investigational animals are not to be used for food unless authorization has been granted by the U.S. Food and Drug Administration or by the U.S. Department of Agriculture.

Manufactured, packaged & distributed by Recombinetics, Inc.

For more information, contact

Customer Support: 612-727-2000

Recombinatios, Inc. www.recombinatics.com

3388 Collins Drive

Eagan, MN 55121 USA

RCI Product Label 003.01 DCM

RCI Product Label 003.01 DCM

YORKAPIG-HF-RBM20 SWINE

rbm20 bglii restriction fragment length polymorphism (rflp) positive for one or two copies of rbm20-r636s not applicable

Product Information				
Product Type	RECOMBINANT DEOXYRIBONUCLEIC ACID CONSTRUCT LABEL	Item Code (Source)	NDC:86086- 003	
Route of Administration	NOT APPLICABLE			

Active Ingredient/Active Moiety Basis of Strength Ingredient Name Strength SUS SCROFA G.(NC_010456.5)121244982C>A + 121244988-SUS SCROFA 121244989CG>TC + 121244991-121244992AG>TC ALTERATION TO G.(NC_010456.5)121244982C>A + EXON 9 OF RBM20 GENE IN YORKSHIRE BREED LARGE WHITE SWINE 121244988-121244989CG>TC + 1 [arb'U] (UNII: O4OJ2CP48E) (SUS SCROFA G.(NC_010456.5)121244982C>A + 121244991-121244992AG>TC in 1 [arb'U] 121244988-121244989CG>TC + 121244991-121244992AG>TC ALTERATION TO ALTERATION TO EXON 9 OF EXON 9 OF RBM20 GENE IN YORKSHIRE BREED LARGE WHITE SWINE -RBM20 GENE IN YORKSHIRE BREED UNII:O4OJ2CP48E) LARGE WHITE SWINE

P	Packaging				
#	Item Code	Package Description	Marketing Start Date	Marketing End Date	
1	NDC:86086-003-01	1 [arb'U] in 1 NOT APPLICABLE			

Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
unapproved drug other		01/06/2020	

Labeler - Recombinetics, Inc. (829874523)

Registrant - Recombinetics, Inc. (829874523)

Establishment				
Name	Address	ID/FEI	Business Operations	
Recombinetics, Inc.		080987344	manufacture	

Revised: 10/2020 Recombinetics, Inc.