

OSSAPIG-FH-PCSK9 MINIATURE SWINE- transposon of the pkt2-e/at-pcsk9-d374y rdna construct in 1513 lineage ossabaw breed swine not applicable
Recombinetics, Inc.

Identity: Single copy insertion of the Sleeping Beauty® transposon of the pKT2-E/AT-PCSK9-D374Y recombinant DNA construct in at least one, but up to three, separate loci (ZCCHC24 locus on chromosome 14 and/or COL21A1 locus on chromosome 7 and/or CDTSP2-ATP23 intergenic locus on chromosome 5) in the 1513 lineage of Ossabaw breed swine (*Sus scrofa*) known as OssaPig-FH-PCSK9.

Claim: Gain of PCSK9 gene function in the Ossabaw breed of swine produces significantly increased hypercholesterolemia and consistent development of advanced atherosclerosis without the requirement for feeding a high fat and high cholesterol diet. Feeding a high fat and high cholesterol diet accelerates atherosclerosis development.

Limitations: The PCSK9 cDNA used in this model was derived from chimpanzee and codon optimized to swine. Since chimp and human PCSK9 are highly conserved (685/ 692 residues) most protein inhibitors will cross-react. However, due to the codon optimization, RNAi therapy could only be evaluated with custom targets as demonstrated in rodents and non-human primates.

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.

Manufactured, packaged & distributed by Recombinetics, Inc., under U.S. Veterinary Master File V-006248. Sleeping Beauty transposon is a U.S. registered trademark of Regents of the University of Minnesota.

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.

OssaPig-FH-PCSK9 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.

OssaPig-FH-PCSK9 animals, or any materials derived from the OssaPig-PCSK9-FH animals, are not intended to enter the human or animal food supply.

OssaPig-FH-PCSK9 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 OssaPig-PCSK9-FH animals, and all materials derived from the OssaPig-FH-PCSK9 animals, from the time the animals are delivered to Purchaser through disposition by incineration. Final disposition notification must be made to Recombinetics, Inc.

Certificate of Animal Health & Identification

Animal Identification			
Ear Notch ID		Birth Date	
Ear Tag ID		Dam ID	
Sex		Boar ID	

Animal Genotype Testing Results			
	Chr 7: 39,422,919	Chr 14: 81,244,844	Chr 15: 167,909,866
Insertion Sites Screened			
Presence = +			
Absence = Ø			

Pedigree Description:

Blood Cholesterol Testing Results:

Pre-Shipment Veterinary Health Status Reviewed On: _____ Date _____

WARNINGS & PRECAUTIONS:

OssaPig-FH-PCSK9 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.

OssaPig-FH-PCSK9 animals, or any materials derived from the OssaPig-PCSK9-FH animals, are not intended to enter the human or animal food supply.

OssaPig-FH-PCSK9 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 OssaPig-PCSK9-FH animals, and all materials derived from the OssaPig-FH-PCSK9 animals, from the time the animals are delivered to Purchaser through disposition by incineration. Final disposition notification must be made to Recombinetics, Inc.

RCI Product Label 000.02 PCSK9

OssaPig-FH-PCSK9 Miniature Swine (transposon of the pKT2-E/AT-PCSK9-D374Y rDNA construct in 1513 lineage Ossabaw breed swine)

Identity: Single copy insertion of the Sleeping Beauty® transposon of the pKT2-E/AT-PCSK9-D374Y recombinant DNA construct in at least one, but up to three, separate loci (ZCCHC24 locus on chromosome 14 and/or COL21A1 locus on chromosome 7 and/or CDTSP2-ATP23 intergenic locus on chromosome 5) in the 1513 lineage of Ossabaw breed swine (*Sus scrofa*) known as OssaPig-FH-PCSK9.

Claim: Gain of PCSK9 gene function in the Ossabaw breed of swine produces significantly increased hypercholesterolemia and consistent development of advanced atherosclerosis without the requirement for feeding a high fat and high cholesterol diet. Feeding a high fat and high cholesterol diet accelerates atherosclerosis development.

Limitations: The PCSK9 cDNA used in this model was derived from chimpanzee and codon optimized to swine. Since chimp and human PCSK9 are highly conserved (885/ 692 residues) most protein inhibitors will cross-react. However, due to the codon optimization, RNAi therapy could only be evaluated with custom targets as demonstrated in rodents and non-human primates.

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.

Manufactured, packaged & distributed by Recombinetics, Inc.

Sleeping Beauty transposon is a U.S. registered trademark of Regents of the University of Minnesota.

For more information, contact:

Customer Support: 612-727-2000

Recombinetics, Inc. www.recombinetics.com

3388 Collins Drive

Eagan, MN 55121 USA

RCI Product Label 000.02 PCSK9

OSSAPIG-FH-PCSK9 MINIATURE SWINE

transposon of the pkt2-e/at-pcsk9-d374y rdna construct in 1513 lineage ossabaw breed swine not applicable

Product Information

Product Type	RECOMBINANT DEOXYRIBONUCLEIC ACID CONSTRUCT LABEL	Item Code (Source)	NDC:86086-001
Route of Administration	NOT APPLICABLE		

Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
1. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO COL21A1 LOCUS ON CHROMOSOME 7 (UNII: FZ8D40UQ9W) (1. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO COL21A1 LOCUS ON CHROMOSOME 7 - UNII:FZ8D40UQ9W)	1. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO COL21A1 LOCUS ON CHROMOSOME 7	1 [arb'U] in 1 [arb'U]
2. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO CDTSP2-ATP23 INTERGENIC LOCUS ON CHROMOSOME 5 (UNII: G4S6J19KXS) (2. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO CDTSP2-ATP23 INTERGENIC LOCUS ON CHROMOSOME 5 - UNII:G4S6J19KXS)	2. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO CDTSP2-ATP23 INTERGENIC LOCUS ON CHROMOSOME 5	1 [arb'U] in 1 [arb'U]
3. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO ZCCHC24 LOCUS ON CHROMOSOME 14 (UNII: P0X1BV8WGD) (3. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO ZCCHC24 LOCUS ON CHROMOSOME 14 - UNII:P0X1BV8WGD)	3. OSSABOW MINIATURE PIG WITH RDNA CONSTRUCT PCSK-D374Y INSERTED INTO ZCCHC24 LOCUS ON CHROMOSOME 14	1 [arb'U] in 1 [arb'U]

Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
---	-----------	---------------------	----------------------	--------------------

1	NDC:86086-001-01	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			01/15/2018	

Labeler - Recombinetics, Inc. (829874523)

Registrant - Recombinetics, Inc. (829874523)

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

Revised: 11/2020

Recombinetics, Inc.