

# SAMTAKO (주)샘타코바이오키리아

우) 447-260 경기도 오산시 서랑동 77-1 / Tel : 031-372-3636 ~ 8 / Fax : 031-372-3654

문서번호 : STK-130906-01

날 짜 : 2013. 09. 06.

수 신 : 실험동물연구원 제위

제 목 : DB 마우스 국내 생산 공급 관련.

1. 귀사(원)의 무궁한 발전을 기원합니다.
2. 당사는 엄격한 barrier system하에서 고품질의 실험동물을 생산 . 관리하고 있으며, 무엇보다 국내에 고품질의 실험동물 공급을 위하여 품질 관리와 생산성 향상에 매진하고 있음을 자부합니다.
3. 국내 실험동물 연구의 지속적인 요구 사항에 맞추어 당사는 품종의 다양화의 일환으로 2013년도부터 db/db 마우스를 당사의 엄격한 system 하에서 생산하여 공급하여 드림을 알려드립니다.
  - 1) 모체 공급사 : Taconic
  - 2) 공급 시기 : 즉시
  - 3) 공급 단가 :

strain	주령 (weeks)	단가 (원)	비고사항
db/db	4	80,000	① 8주령 이상 동물에 대해서는 별도 문의 ② 5마리 이하 주문시 박스값 별도 부과
	5	90,000	
	6	100,000	
	7	110,000	

- 4) Strain Certificate 및 동물 관련 정보는 첨부된 자료를 참고하여 주시길 바랍니다.
  - 5) 자체 혈당 및 체중 측정 데이터는 첨부된 자료를 참고하여 주시길 바랍니다.
  - 6) 미생물 모니터링 및 유전 모니터링 report에 대해서는 당사에 별도로 문의 주시길 바랍니다.
4. 앞으로도 지속적으로 당사에 대한 관심과 지원을 부탁드립니다. 감사합니다.

- 첨부 : ① Strain Certificate (1장)
- ② DB 마우스 Description (1장)
- ③ 자체 혈당 및 체중 측정 데이터 (4장)

- 이 상 -

(주)샘타코바이오키리아 (직인생략)

## **CERTIFICATE OF STRAIN**

**This is to certify that the starting breeders of the following strain have been supplied by Taconic Farms, Inc. to Samtako Bio Korea on December 2012, and have been expanded and maintained under Samtako SOP.**

**Strain Name: DB**

**Formal Nomenclature:** BKS.Cg-*m*+/*+**Lepr*<sup>db</sup>/BomTac

**Origin:** The Diabetic spontaneous mutant model was developed by Hummel *et al.* in 1959 by discovering a *Lepr*<sup>db</sup> mutation on a C57BLKS background. M&B A/S (now Taconic Europe) received stock from CERJ France in 1991. The mice were derived by embryo transfer in 2005 at Taconic US and are maintained by incrossing brother x sister mice.

**Color:** Black (Homozygous and Heterozygous) and Misty (Grey) (Wild)



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**Ana V. Perez, Ph.D.**  
**Genetics Department Head**  
**Taconic Farms, Inc.**  
**One Hudson City Centre, Hudson, NY 12534, USA**

# Diabetic

SPONTANEOUS MUTANT DIABETES/OBESITY MICE

## BKS Background

## Model Description

- A suitable model for the study of diabetic neuropathology and nephropathy
- Also used in the study of the pathogenesis and prevention of Type II Non-Insulin Dependent Diabetes Mellitus (NIDDM)
- Experiences a hyperinsulinemic phase (Phase 1) followed by a hypoinsulinemic phase (Phase 2) at 2-3 months of age
- Due to possible crossover of the misty (m) and Lepr<sup>db</sup> genes, a low percentage of DB-M could be heterozygous for the misty (m) gene
- Only homozygotes (black) are diabetic and obese, heterozygotes (black) and wild types (misty) are non-diabetic and lean \*Pricing is for ungenotyped lean or obese animals. Customers wanting genotyped animals must allow for an extra 2 week leadtime.

**Origin :** The Diabetic Spontaneous mutant model was developed by Hummel et al in 1959 by discovering a Lepr<sup>db</sup> mutation on a C57BLKS background. M&B A/S (now Taconic Europe) received stock from CERJ France in 1991. The mice were derived by embryo transfer in 2005 at Taconic US and are maintained by incrossing brother x sister mice.

**Color :** Black

## Genetics :

- *Strain Profile:* Akp1<sup>a</sup>, Akp2<sup>a</sup>, Anpep<sup>a</sup>, Car2<sup>a</sup>, Es1<sup>a</sup>, Es2<sup>b</sup>, Es3<sup>a</sup>, Es5<sup>b</sup>, Es9<sup>a</sup>, G6pd1<sup>a</sup>, Gpi1<sup>b</sup>, Got2<sup>b</sup>, Hbb<sup>s</sup>, Idh1<sup>b</sup>, Ldr1<sup>a</sup>, Ldr2<sup>a</sup>, Mod1<sup>b</sup>, Mup1<sup>b</sup>, Pep3<sup>b</sup>, Pgm1<sup>a</sup>, Trf<sup>b</sup>
- *Immunology:* H2<sup>d</sup>
- *Mutation:* Lepr<sup>db</sup>, m

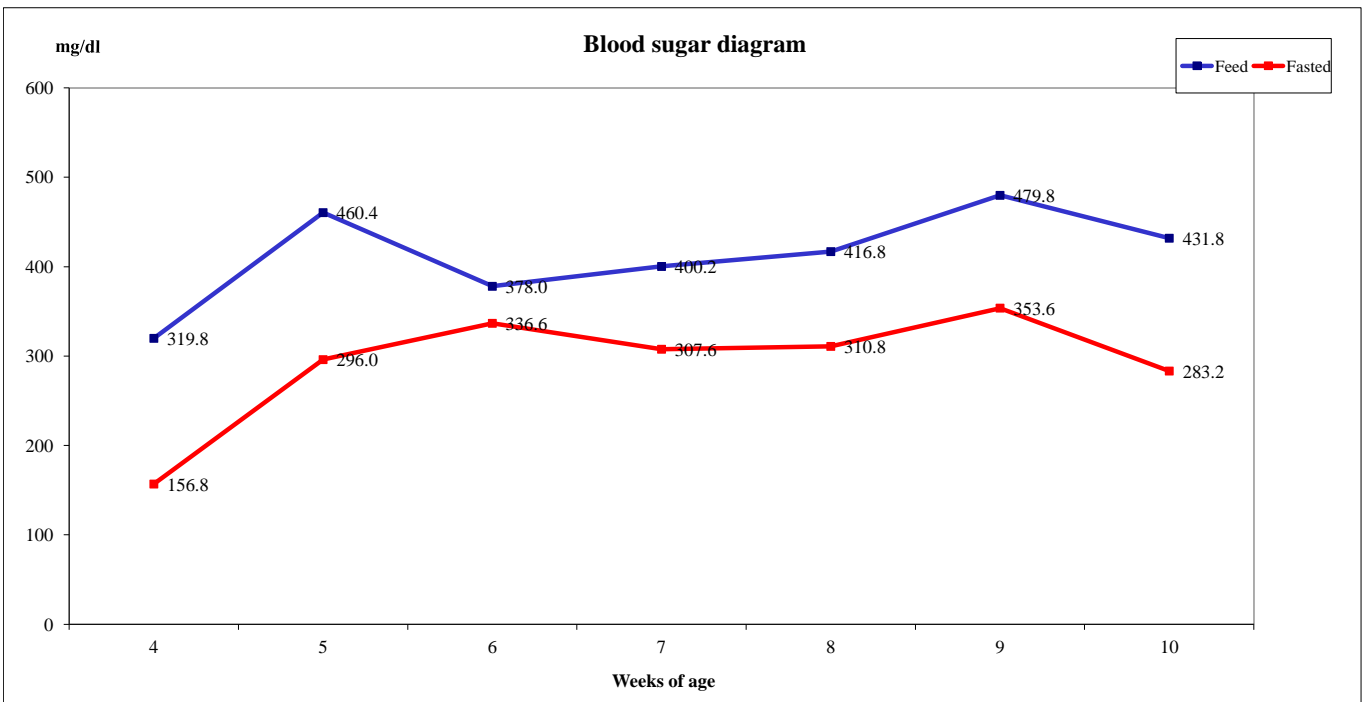


## Blood sugar diagram -Samtako

<b>IBRS:</b>	302	<b>Sex:</b>	Female	<b>Measuring Instrument</b>	Roche ACCU-CHEK Performa Nano
<b>Strain:</b>	Diabetic	<b>Quantity:</b>	5	<b>Fasted time</b>	16 Hours

FEED	4	5	6	7	8	9	10
1	233	398	378	572	400	503	553
2	348	352	518	246	283	558	445
3	249	450	321	297	498	380	390
4	428	512	378	508	512	HI	290
5	341	590	295	378	391	478	481
Average	319.8	460.4	378.0	400.2	416.8	479.8	431.8
Lower dev.	240.0	366.6	291.8	262.3	323.9	405.3	332.9
Upper dev.	399.6	554.2	464.2	538.1	509.7	554.2	530.7

FASTED	4	5	6	7	8	9	10
1	118	337	384	398	395	529	254
2	100	332	348	344	138	540	187
3	199	318	351	294	219	159	155
4	162	217	289	97	516	306	344
5	205	276	311	405	286	234	476
Average	156.8	296.0	336.6	307.6	310.8	353.6	283.2
Lower dev.	109.7	245.7	299.5	181.6	162.4	180.4	153.4
Upper dev.	203.9	346.3	373.7	433.6	459.2	526.8	413.0

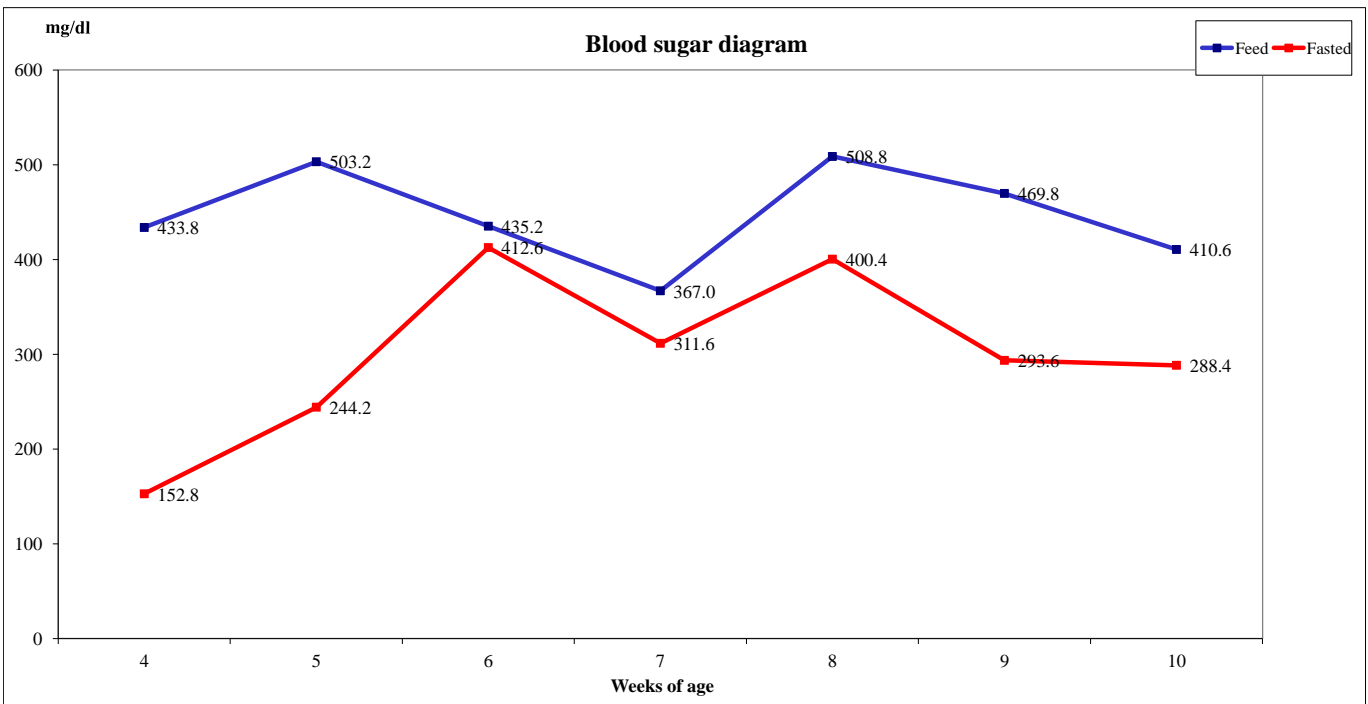


## Blood sugar diagram-Samtako

<b>IBRS:</b>	302	<b>Sex:</b>	Male	<b>Measuring Instrument</b>	Roche ACCU-CHEK Performa Nano
<b>Strain:</b>	Diabetic	<b>Quantity:</b>	5	<b>Fasted time</b>	16 Hours

FEED							
	4	5	6	7	8	9	10
1	390	520	420	273	528	495	306
2	322	400	520	268	HI	507	411
3	444	545	433	348	483	HI	498
4	452	512	476	510	554	448	438
5	561	539	327	436	470	429	400
Average	433.8	503.2	435.2	367.0	508.8	469.8	410.6
Lower dev.	345.7	444.0	363.1	261.9	469.7	432.5	340.9
Upper dev.	521.9	562.4	507.3	472.1	547.8	507.0	480.3

FASTED							
	4	5	6	7	8	9	10
1	112	260	451	284	389	472	331
2	152	145	462	212	461	249	338
3	208	401	326	148	473	262	234
4	157	174	442	522	347	191	212
5	135	241	382	392	332	294	327
Average	152.8	244.2	412.6	311.6	400.4	293.6	288.4
Lower dev.	117.3	144.7	355.1	163.1	336.0	187.1	228.1
Upper dev.	188.3	343.7	470.1	460.1	464.8	400.1	348.7



# Weight diagram-Samtako

IBRS: 302

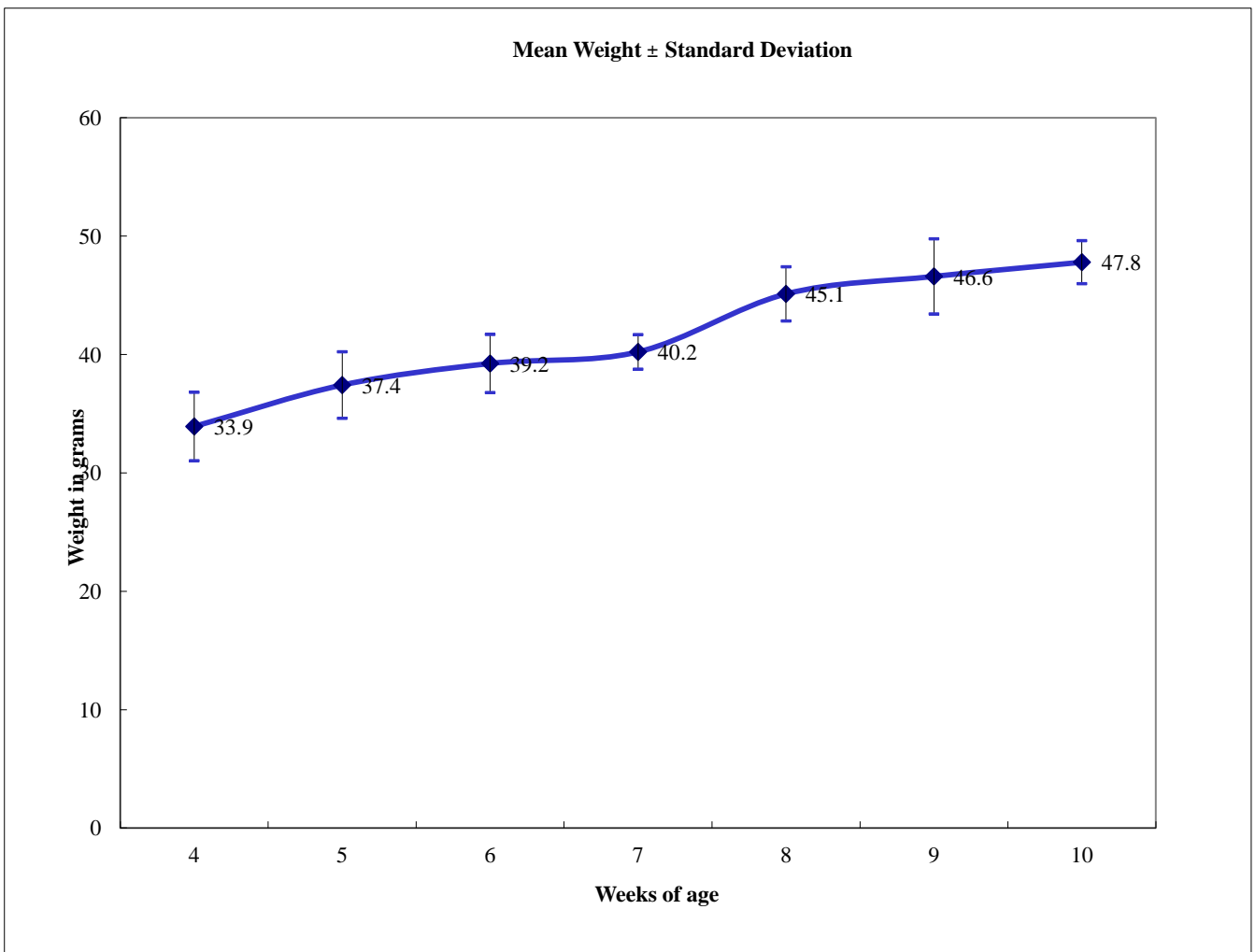
Strain: DB

Sex: Female

Quantity: 5

Q per cage: 5

Reg. Nr.	Age [weeks]						
	4	5	6	7	8	9	10
1	31.4	35.6	41.8	40.6	46.4	49.5	47.1
2	35.0	40.0	40.2	37.8	42.6	42.1	47.0
3	30.3	33.4	39.8	41.6	46.5	46.5	45.6
4	36.5	39.3	35.2	41.0	42.7	45.2	50.1
5	36.4	38.8	39.2	40.1	47.4	49.7	49.2
Average	33.9	37.4	39.2	40.2	45.1	46.6	47.8
Lower dev.	31.0	34.6	36.8	38.8	42.8	43.4	46.0
Upper dev.	36.8	40.2	41.7	41.7	47.4	49.8	49.6



# Weight diagram-Samtako

IBRS: 302

Strain: DB

Quantity: 5

Sex: Male

Q per cage: 5

Reg. Nr.	Age [weeks]						
	4	5	6	7	8	9	10
1	34.9	38.5	37.2	44.6	45.9	46.7	43.8
2	31.3	35.2	39.9	44.5	41.7	49.8	42.9
3	40.3	43.7	43.5	43.9	44.7	46.1	42.7
4	40.7	44.5	44.2	48.4	44.6	45.2	43.6
5	39.3	43.2	42.7	43.4	46.8	48.1	44.1
Average	37.3	41.0	41.5	45.0	44.7	47.2	43.4
Lower dev.	33.2	37.0	38.6	43.0	42.8	45.4	42.8
Upper dev.	41.4	45.0	44.4	46.9	46.7	49.0	44.0

