

( )

## $\beta$ 3-Adrenoceptor Trp64Arg

(ADRB3)  $\beta$ 3-Adrenoceptor : \_\_\_\_\_

ADRB3 Trp64Arg

: \_\_\_\_\_

( )

BMI < 20, 20 ≤ BMI < 25, 25 ≤ BMI < 30, BMI ≥ 30 :

HDL-C

(BSTN1)

RFLP

PCR

/ ± / kg/m :TT)

/

A

: \_\_\_\_\_

(p: / ± / kg/m :TA/A

$\beta$ 3-Adenoceptor Trp64Arg

: \_\_\_\_\_

$\beta$ 3-Adenoceptor

:

/ / : / / : / / :

( )

BMI

BMI

:

BMI

BMI ( )  
BMI ( )  
BMI ( )

BMI

ADR β3

SPSS

EDTA

Trp64Arg

(8p12-q11.2) ADR β3

HDL-C ( )

LDL-C

mg/dL

mg/dL

% /

% / /

DNA

(Tris-HCl 10mmol/L, MgCl2 Lysis

PBS 5mmol/L, Triton X %1 pH 7.6)

DNA

RBC

DNA

Salting Out

DNA

PCR

ADRB3

bp

EDTA

dNTPs : μL

PCR

Taq 10X PCR buffer , MgCl2(1.5mM) mix(0.2mM)

DNA Polymerase (1U)

5'- 5'CGCCCAATACCGCCAACAC -3

BMI )

) CCACCAGGAGTCCCATCACC -3'

(

DNA ng (

β3 Adrenoceptor Trp64Arg

i- Pima Indians

(n= )	(n= )	( )
/ ± *	± /	( )
± †	/ ± /	( )
± *	±	( )
±	±	( )
± †	±	( )
/ ± / †	/ ± /	
± †	±	( )
±	±	( )
± *	±	( )
± *	±	( )
± †	±	( ) HDL-C
±	±	( ) LDL-C

p< / † p< / \*

TBE % ) RFLP  
 bp Trp64 ( Hybaid )  
 bp Arg64  
 bp i ( :  
 ( ( ) °C  
 SPSS : °C ii ( °C  
 ± ) °C iii ( )  
 ( ( )  
 PCR ( ) °C  
 ANOVA t  
 post-hoc %  
 BMI  
 ) TT ( ) AA/TA  
 / ( U PCR μL  
 ( Roche ) MvaI  
 °C

( )

i- Denaturation  
 ii- Annealing  
 iii-Extention

/

/ Trp

LDL-C HDL-C

LDL-C

HDL-C

BMI

TT  
BMILDL-C HDL-C  
AA/TA**β3-Adrenoceptor****BMI**

≤ BMI (n= )	≤ BMI< (n= )	≤ BMI< (n= )	BMI< (n= )	
( / )	( / )	( )	( / )	:β3 Adrenoceptor
( / )	( / )	( / )	( )	** (%)AA/TA
±	±	±	±	** (%)TT
±	±	± †	± ‡	( )
±	±	± †	± *	( )
±	±	±	± ‡	( )
±	±	± †	± *	( )
±	±	± †	± *	( )
±	±	±	± Δ	( ) HDL-C
±	±	± ‡	± *	( ) LDL-C
ANOVA				**
BMI				
< ≤ BMI<	(p< / )*		(p< / )	
≤ ≤ BMI<	(p< / )‡ ≤ BMI	≤ BMI<	(p< / )† ≤ BMI	≤ BMI
	≤ BMI<	(p< / )‡ ≤ BMI	≤ BMI	(p< / )Δ BMI

		( )	( )
±	±		( )
±	±	( )	
±	±	( )	
± *	±		( )
±	±		( )
/ ± / *	/ ± /		
/ ± / *	± /	( )	
± *	±	( )	
± *	±	( )	
± *	±	( )	
±	±	( )	) HDL-C
±	±	( )	) LDL-C

p < / \*

(n= ) (<%)

Trp64Arg

≤ BMI <    ≤ BMI <    BMI < )

( ≤ BMI

Trp64Arg

( )

( ± / )

( )    ( / ± / )

Trp64Arg

Trp64Arg

A

( ± /    / ± / )

64

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