Transgenerational deep sequencing revealed hypermethylation of hippocampal mGluR1 gene with altered mRNA expression of mGluR5 and mGluR3 associated with behavioral changes in Sprague Dawley rats with history of prolonged febrile seizure

Oluwole Ojo Alese^{1*}, Musa V. Mabandla ¹

¹Department of Human Physiology, College of Health Sciences, University of Kwazulu-Natal, South Africa

*Corresponding author:

E-mail address: alese44@yahoo.com

Department of Human Physiology, College of Health Sciences, University of Kwazulu-Natal, 4000, South Africa.



Inqaba Biotechnical Industries (Pty) Ltd P.O. Box 14356, Hatfield 0028, South Africa

Tel: 012 343 5829 Fax: 012 343 0287

E-mail: info@inqaba.com

SYNTHESIS REPORT

31 Oct 2016

Client Detail:

Oluwole Alese

University of KwaZulu-Natal, School of Laboratory

Medicine Medical Sciences

Human Physiology, 2 F-409, University Road

Westville Campus

Durban 320

South Africa

Name:	Grm5 gene F		Bar	code: S287E	Length: 20 bases		
Sequence:	TCCAGCAGCCTAGTCAACCT						
OD	12.0061	MW min \ max	6021.4\602	1.45' Mod	None		
nmoles	58.37	GC % min \ max	55\55	3' Mod	None		
Tm min \ max	62.45\62.45			Purification	Standard		
For a 100 µM s	tock solution	n add 583.67 µl wate	r or buffer		PAGE QC Image >>		
	- 74		STAND	EN THE			
Comments							

Name:	Grm5 gene R . Barc			code: S287F	Length: 20 bases	
Sequence:	CAGATTT	TCCGTTGGAGCTT				
P dends b						
OD	14.1588	MW min \ max	6113.8\6113	3.8 5' Mod	None	
nmoles	69.3	GC % min \ max	45\45	3' Mod	None	
Tm min \ max	58.35\58.3	5	M. II III A. III	Purification	Standard	
For a 100 µM s	tock solution	n add 693.04 µl wate	r or buffer	B.J. valleredistributeur van sansagsgane – sig va vye vyewynge	PAGE QC Image	>>
A	700 - 500					
Comments						

Grm3 gene F Barco			ode: S2880	Length: 22 bases		
CGCTCTCCTAATCTCCCTCTGG						
1	P. 17 . 30 .			- THE LAND		
14.3146	MW min \ max	6572.9\6572.	9 5' Mod	None		
71.39	GC % min \ max	59.09\59.09	3' Mod	None		
66.4\66.4		[Purification	Standard	and the y	
tock solution	1 add 713.95 µl water	r or buffer		PAGE QC In	nage >>	
1862		4.717710		0.00		
	14.3146 71.39 66.4\66.4	CGCTCTCCTAATCTCCCTCTG 14.3146	CGCTCTCCTAATCTCCCTCTGG 14.3146	CGCTCTCCTAATCTCCCTCTGG	CGCTCTCCTAATCTCCCTCTGG	

Name:	Grm3 gene R Barce			de: S2881	Length: 19 bases		
Sequence:	CTCCTCTTCTCTTATCAGG						
		T N	111		10/10/15 Sept 15/17		
OD	14.5863	MW min \ max	5680.7\5680.7	7 5' Mod	None		
nmoles	83.02	GC % min \ max	47.37\47.37	3' Mod	None		
Tm min \ max	58.01\58.01	1	1	Purification	Standard		
For a 100 µM s	tock solution	add 830.18 µl wate	r or buffer		PAGE QC Image >>		
	- 7	Y	1 30 3	100000	100 1 1 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Comments	1	III.GL ASTAIL					

RECOMMENDATIONS FOR HANDLING AND STORAGE OF OLIGOS

- Lyophilized oligo pellets might become displaced from the bottom of the tube during shipment. Briefly centrifuge each tube before opening to prevent the loss of the pellet.
- Prepare stock solution of oligos (e.g. 100 uM = 100 pmole per ul) preferably with a sterile buffered solution such as TE (10 mM Tris, pH 7.5 to 8.0, 1 mM EDTA). If sterile distilled water is used, make sure that the pH is above 7.0 since acidic solutions favours oligo depurination and subsequent loss of activity.
- Working solutions might be diluted from the stock solution with sterile, nuclease-free water to prevent inhibition of enzymatic reactions (e.g. PCR) by EDTA.
- Store the oligos as concentrated stock solution or lyophilized at -20° C.
- Avoid frequent freeze-thaw cycles by dividing the stock solution into smaller aliquots for long term storage and to prevent accidental contamination.
- Dye-modified oligos are light sensitive and should always be stored in the dark.
- Re-suspend modified oligos preferably in a slightly basic solution (i.e., TE at pH 8.0). However, Cy dye modified oligos are best kept at pH 7.0 at -20° C.
- Preferably store the modified oligos as dried aliquots at -20° C.