

Supplemental data

Whole-Exome Sequencing in a South American Cohort Links ALDH1A3, FOZN1 and Retinoic Acid Regulation Pathways to Autism Spectrum Disorders

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Table S1. Retinoic Acid Response Elements (RAREs) found 30000bp upstream and 1000bp downstream from the initial transcription site in both DNA strands for ALDH1A3 and FOXN1 genes in humans, and Aldh1a3 and Foxn1 genes in mice. Relative positions are given from the initial transcription site of each gene.

Gene	RARE pattern	Relative Position	Strand	Score	ln(P-value) < CutOff		
Human							
ALDH1A3	5'-(A/G)G(G/T)(G/T)(G/C)A-NN-(A/G)G(G/T)(G/T)(G/C)A-3'	-8744 -13955	- +	10.61	-11.09 < -9.456		
	5'-(A/G)G(G/T)(G/T)(G/C)A-N-(A/G)G(G/T)(G/T)(G/C)A-3'	-8815 -26896	- -	10.58	-11.09 < -9.441		
FOXN1	5'-(A/G)G(G/T)(G/T)(G/C)A-NNNNN-(A/G)G(G/T)(G/T)(G/C)A-3'	-4574 -12786 -21671 -23466 -27282 -28005	- - + - + -	10.69	-11.09 < -9.489		
		5'-(A/G)G(G/T)(G/T)(G/C)A-NN-(A/G)G(G/T)(G/T)(G/C)A-3'	-4153 -6261 -7716 -10156 -16969 -23267 -24194 -26456 -27258 -29727	+ - - + - + + + + -	10.61	-11.09 < -9.456	
			5'-(A/G)G(G/T)(G/T)(G/C)A-N-(A/G)G(G/T)(G/T)(G/C)A-3'	-1112 -12480	+ +	10.58	-11.09 < -9.441
			Mouse				
			Aldh1a3	5'-(A/G)G(G/T)(G/T)(G/C)A-NNNNN-(A/G)G(G/T)(G/T)(G/C)A-3'	-1967 -24615	+ -	10.69
	5'-(A/G)G(G/T)(G/T)(G/C)A-NN-(A/G)G(G/T)(G/T)(G/C)A-3'			-16982	-	10.61	-11.09 < -9.456
5'-(A/G)G(G/T)(G/T)(G/C)A-N-(A/G)G(G/T)(G/T)(G/C)A-3'	-5675 -13311 -13642 -18348 -19711 -21905 -29711	+ - - - - - -		10.58	-11.09 < -9.441		
	Foxn1	5'-(A/G)G(G/T)(G/T)(G/C)A-NNNNN-(A/G)G(G/T)(G/T)(G/C)A-3'		-7422 -8341 -8732 -10426 -21635	+ - + - -	10.69	-11.09 < -9.489
		5'-(A/G)G(G/T)(G/T)(G/C)A-NN-(A/G)G(G/T)(G/T)(G/C)A-3'		-2934 -17785 -21624 -29571	+ + - -	10.61	-11.09 < -9.456
		5'-(A/G)G(G/T)(G/T)(G/C)A-N-(A/G)G(G/T)(G/T)(G/C)A-3'	-13060 -29307	- -	10.58	-11.09 < -9.441	