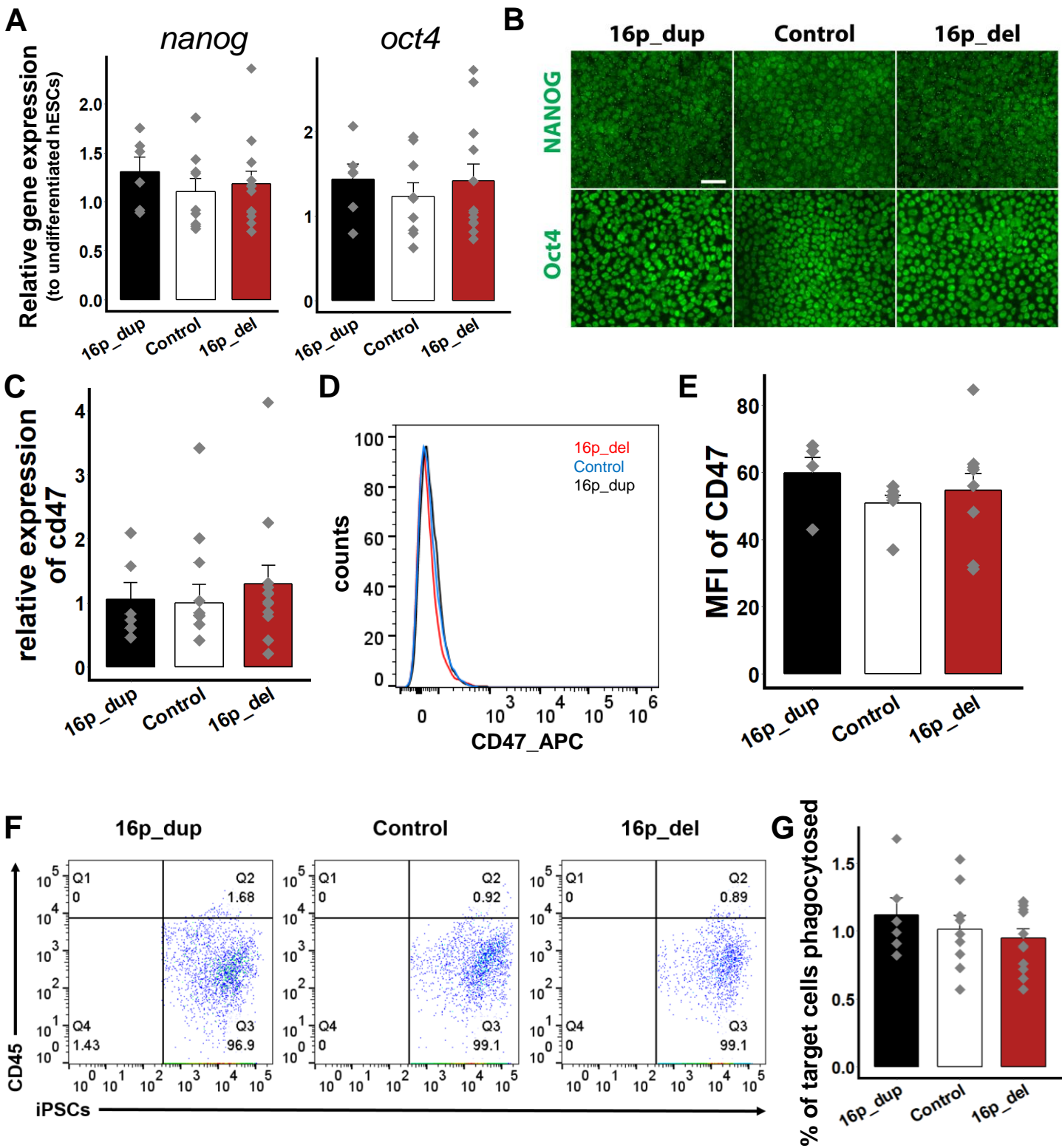
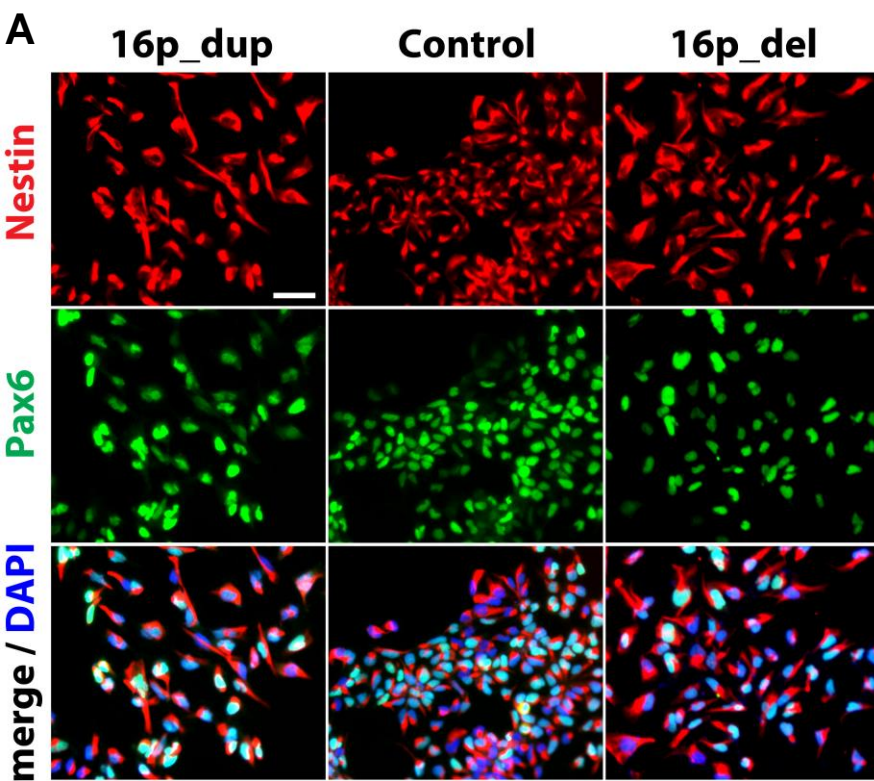


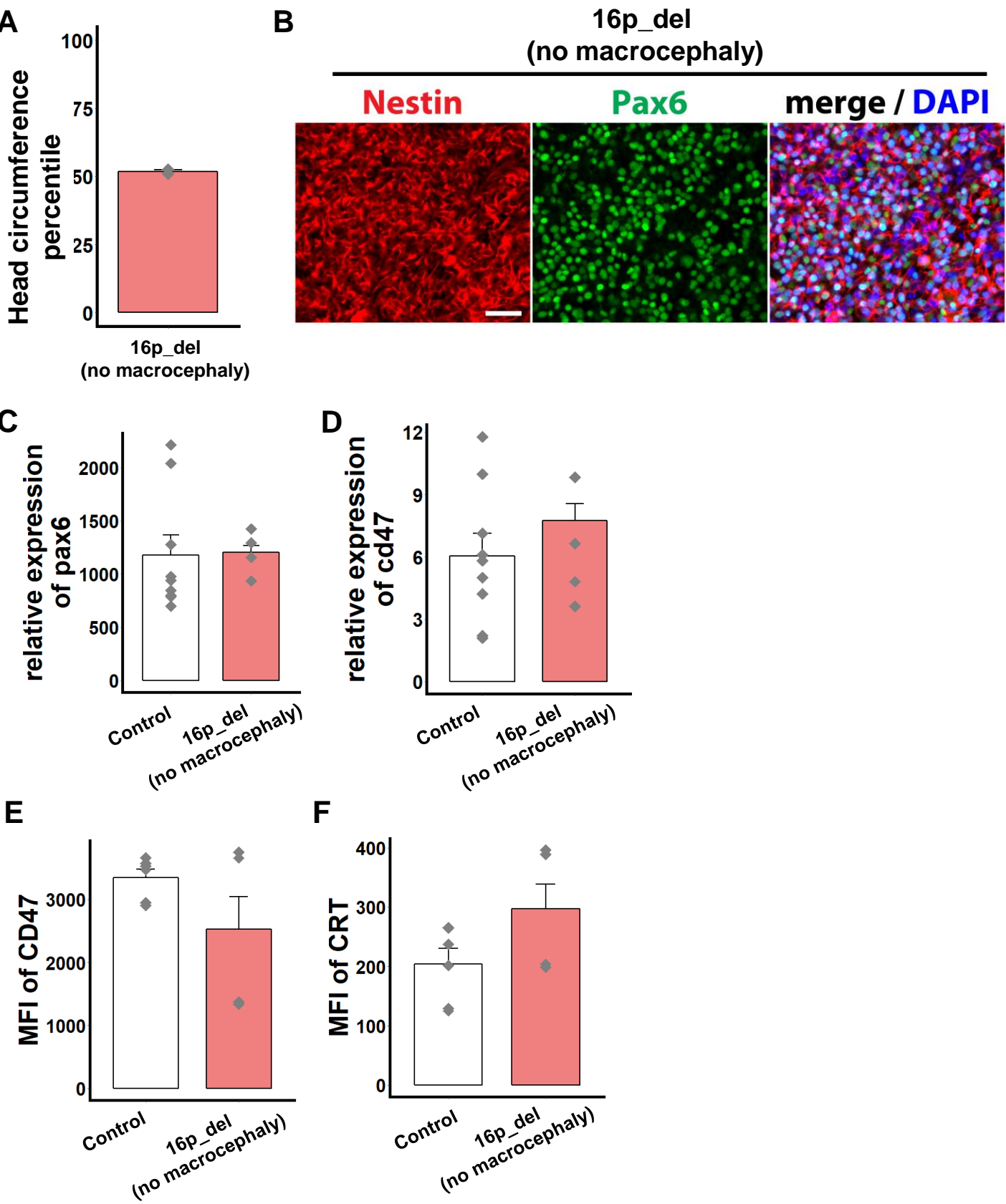
Supplementary Figure 1



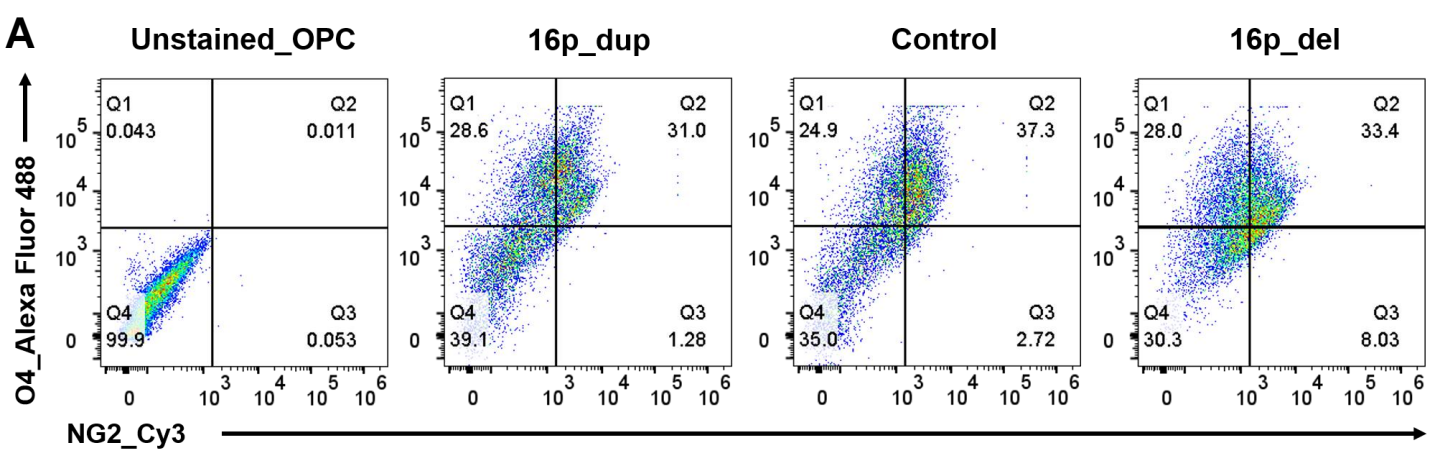
Supplementary Figure 2



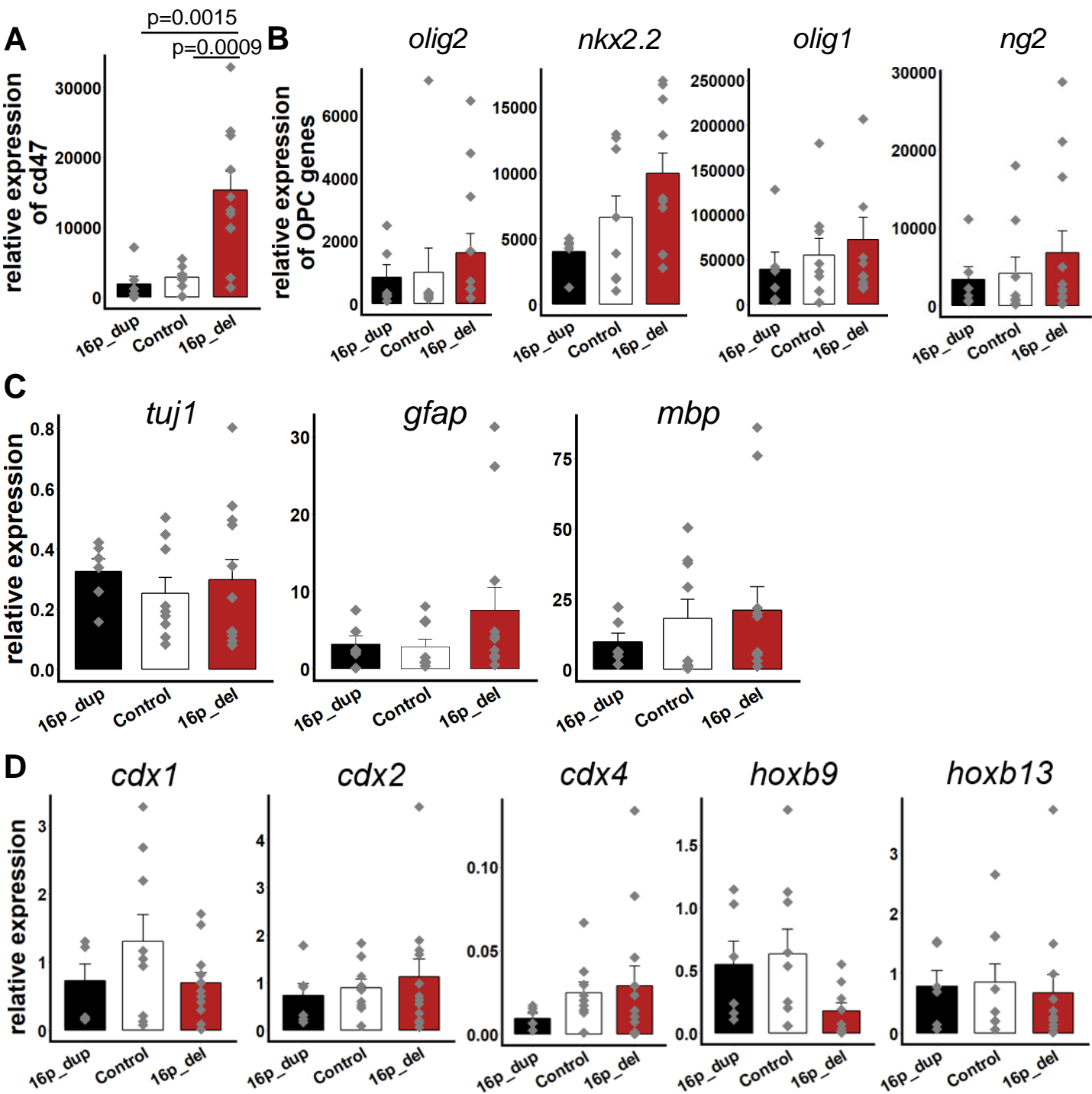
Supplementary Figure 3



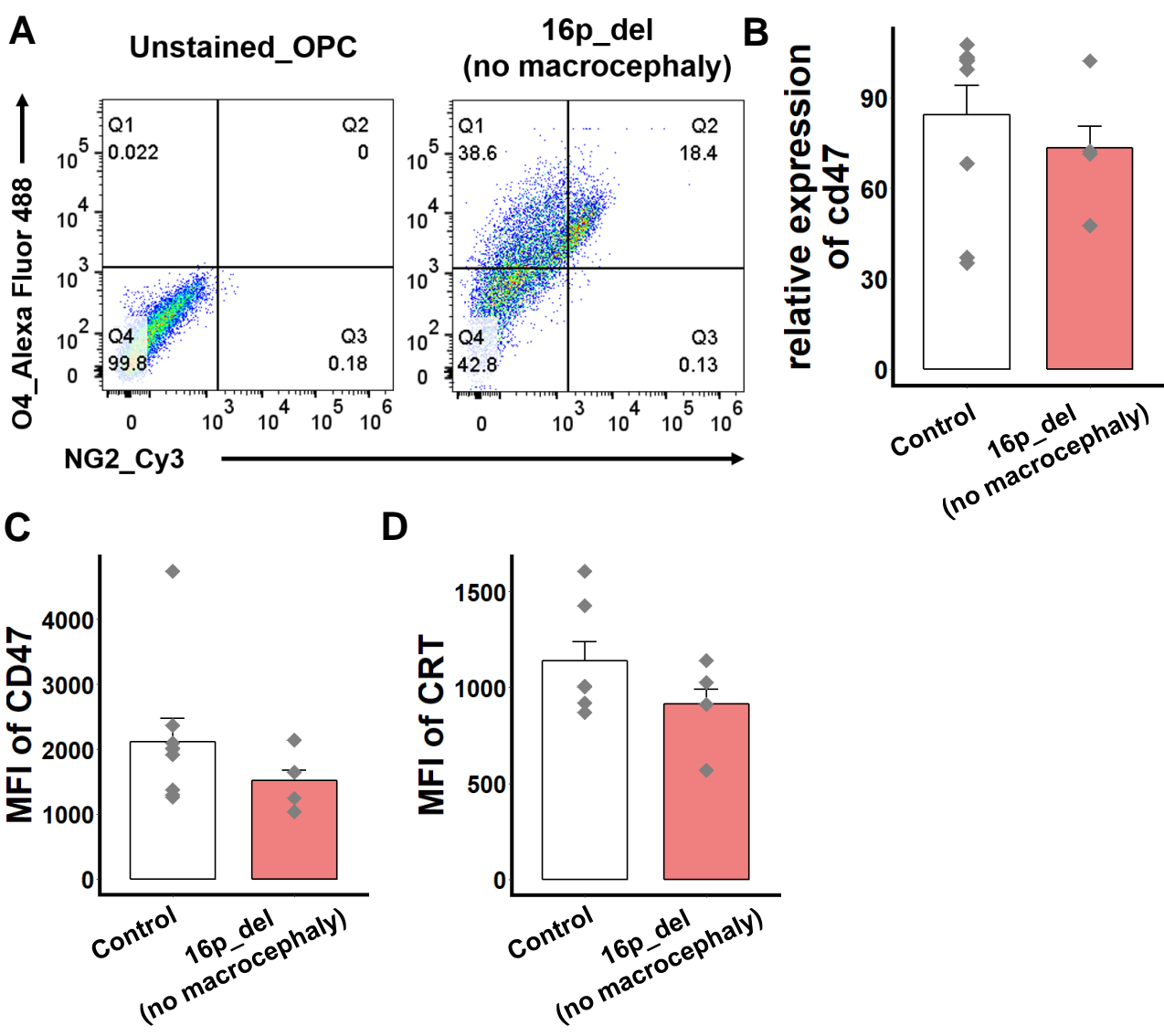
Supplementary Figure 4



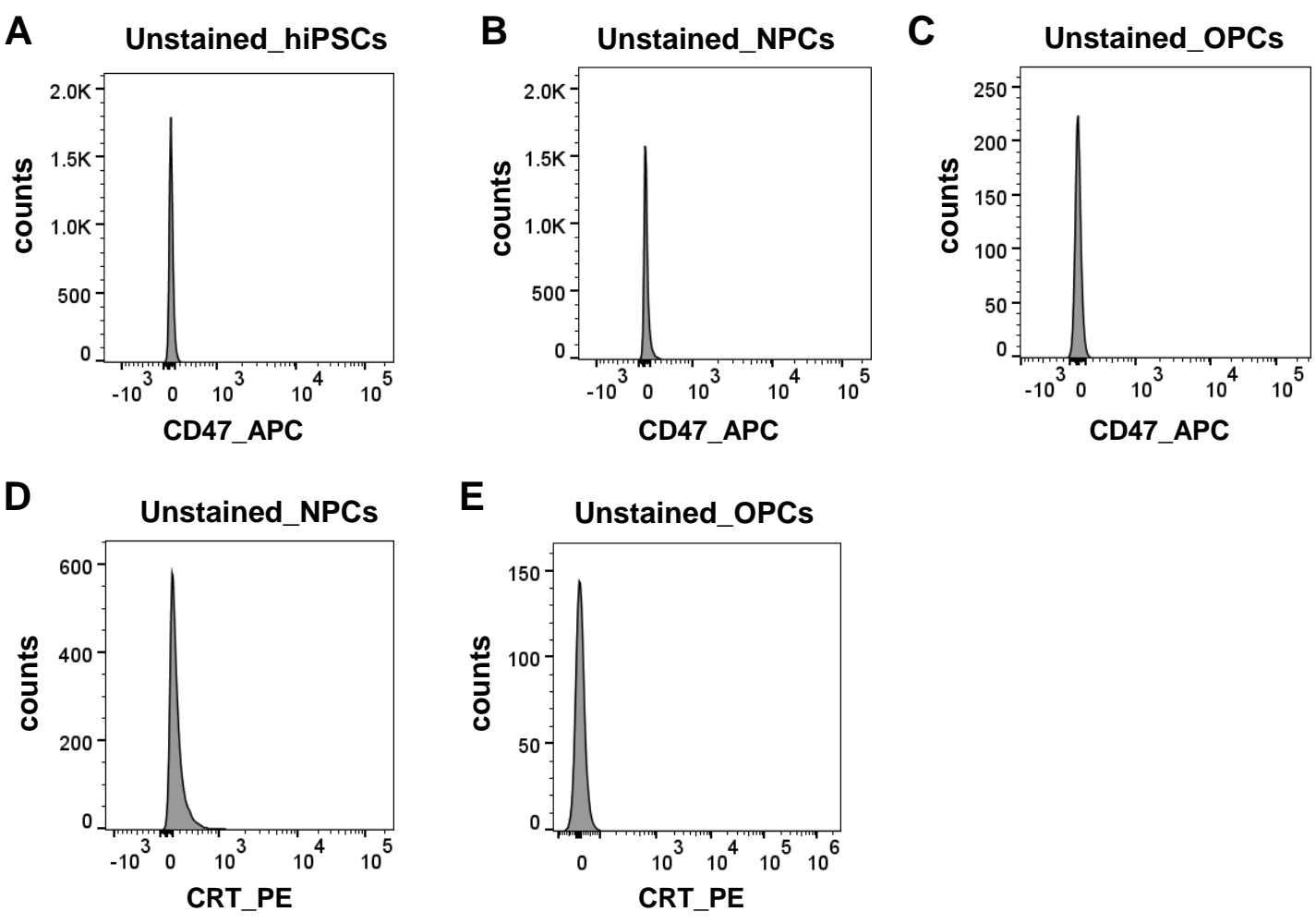
Supplementary Figure 5



Supplementary Figure 6



Supplementary Figure 7



Supplementary Table 1. Clinical characteristics of 16p11.2 CNV subjects and controls

Subject ID	CNV status	Inheritance	Diagnosis	Age of Evaluation (months)	Head Circumference Percentile
14756.x16	16p11.2-duplication	inherited	Non-spectrum-diagnosis	45	12
14756.x9	16p11.2-duplication	unknown	No diagnosis	315	73
14739.x3	16p11.2-deletion	unknown	Intellectual disability	95	99
14765.x2	16p11.2-deletion	unknown	Intellectual disability	152	91
14799.x1	16p11.2-deletion	de-novo	Autism spectrum disorder	174	99
14824.x13	16p11.2-deletion	de-novo	Autism spectrum disorder	172	99
14763.x7	16p11.2-deletion	de-novo	Non-spectrum-diagnosis	62	48
14746.x8	16p11.2-deletion	inherited	Autism spectrum disorder	119	57
8343	normal	-	No diagnosis	-	-
2788.3	normal	-	No diagnosis	-	-
511	normal	-	No diagnosis	-	-

Supplementary Table 2. Primer sequences for qRT-PCR.

Human Gene	Forward Sequence	Reverse Sequence
<i>gapdh</i>	GGAGCGAGATCCCTCCAAAAT	GGCTGTTGTCATACTTCTCATGG
<i>cdipt</i>	TTCTTTCTACTTCATGCCCTG	CCCAAACCGGGTTCCTT
<i>coro1a</i>	TGTC AACCTAAGTTTGTGG	TTCTTGCCACACGTCCA
<i>ppp4c</i>	GCACTGAGATCTTTGACTACC	TCGGTCGATTGTCCGAAT
<i>qprt</i>	CTGGTGCCGACCTTGT	GAACTGGGCCTTCAGCA
<i>ypel3</i>	CAGGCCTACTTGGATGATTG	TGAGTTGAAGAGGTAGGCA
<i>pax6</i>	GCAGATGCAAAGTCCAGGTG	CAGGTTGCGAAGAACTCTGTTT
<i>cd47</i>	AGAATTCACGTTTTGTAATGACACT	GTGGGGACAGTGGACTTGTT
<i>olig2</i>	TGCGCAAGCTTTCCAAGAT	CAGCGAGTTGGTGAGCATGA
<i>nkx2.2</i>	GACA ACTGGTGGCAGATTTGCTT	AGCCACAAAGAAAGGAGTTGGACC
<i>olig1</i>	TGCTATGACCTTTCCGCAGT	ACACCGTCAGGAAACAAGGT
<i>ng2</i>	CTTCATCCACGATGGCTCTGA	TGGGCAGGAGGTATGTTTGG
<i>pdgfra</i>	GGGCACGCTCTTTACTCCAT	ACAGCCTAAGACCAGGAACG
<i>mbp</i>	GGCAAGGTACCCTGGCTAA	GGGTGGTGTGAGTCCTTGTA
<i>gfap</i>	AAGATCCACGAGGAGGAGGTT	TGCGTGCGGATCTCTTTGAG
<i>tuj1</i>	GGCCAAGGGTCACTACACG	GCAGTCGCAGTTTTTCACACTC
<i>cdx1</i>	GGTTACAGAATCACAGCCCTC	CTTGGTCCGAATAAAGTCCTC
<i>cdx2</i>	GGGCTCTCTGAGAGGCAGGT	CCTTTGCTCTGCGGTTCTG
<i>cdx4</i>	AGTCTGGGGCTCACCTAC	CTGTGCCATTGTACTAGACG
<i>hoxb9</i>	CCGTCTACCACCCTTACATCC	CGTAGCCGGGTCTTTGATTAG
<i>hoxb13</i>	AGCTCCCGTGCCTTATGGTTA	GGCTGGTAGGTTCCCGGATA