

Human microRNA inhibits expression of pathogenic gene underlying facioscapulohumeral muscular dystrophy

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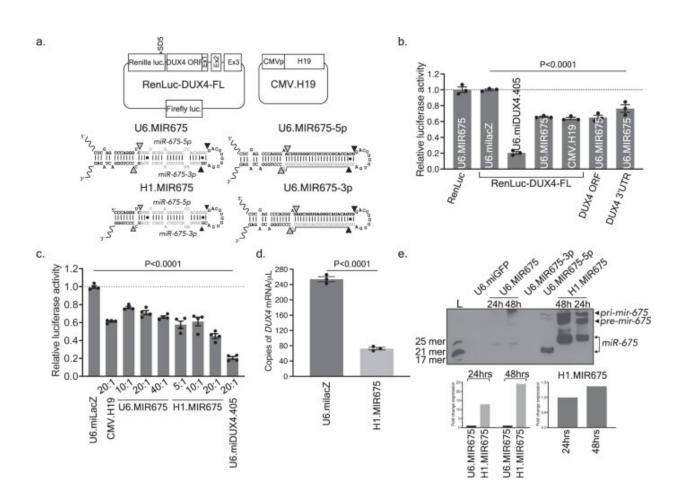


Fig. 1: miR-675 targets the DUX4 ORF and 3'UTR. a RenLuc-DUX4-FL dualluciferase reporter and CMV.H19 constructs, and U6.MIR675, H1.MIR675, U6.MIR675-3p, and U6.MIR675-5p miRNAs. RenLuc-DUX4-FL contains DUX4 ORF and 3'UTR sequences fused to Renilla luciferase after the stop codon. Exons 1–3 are indicated (Ex1,2,3). *SD5 indicates silent mutation of a



cryptic splice donor in Renilla luciferase. Firefly luciferase is used as transfection control. b U6.MIR675 reduced relative Renilla luciferase activity in constructs containing full-length DUX4, DUX4 ORF only, or DUX4 3' UTR only ($35 \pm 3\%$, $34 \pm 2\%$, and $24 \pm 5\%$, respectively; P

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