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Polysialic acid sustains cancer cell survival and migratory capacity in a hypoxic environment

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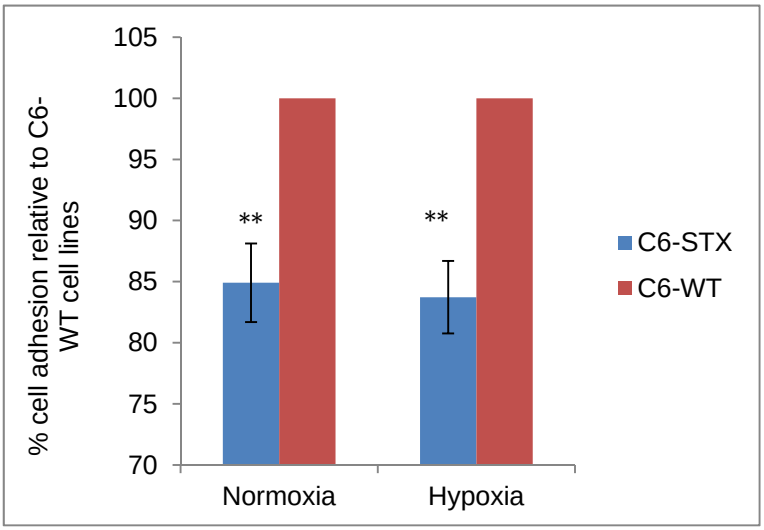
Supplementary data 1 (S1)



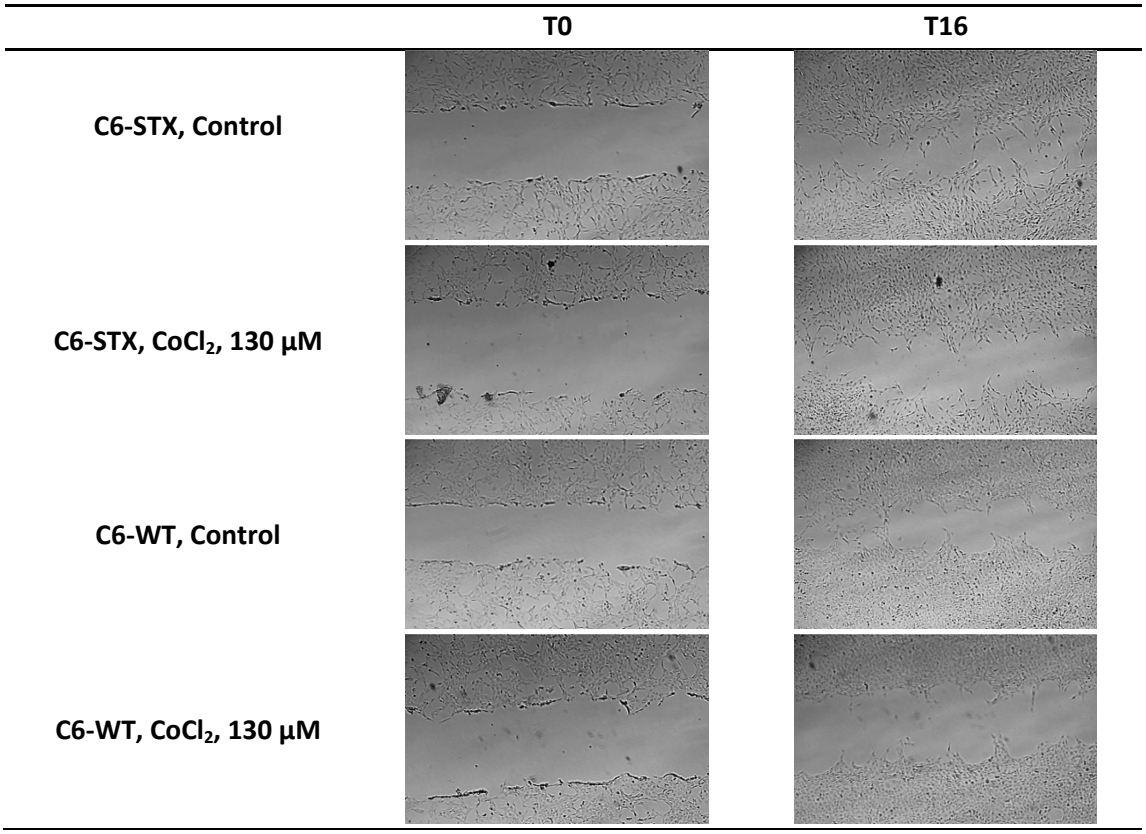
S1. Effect of hypoxia on the polySia-mediated adhesiveness of cancer cells. A polySia-mediated reduction in cell adhesion to Matrigel© in C6-STX but not C6-WT cell line was observed under both normoxia and hypoxia. (**P≤0.01)

Supplementary data 2 (S2)

Cell line and conditions	Apoptotic cells		Viable cells
	Late apoptotic (necrotic)	Early apoptotic	
SH-SY5Y (Normoxia)	6.16± 0.15	10.36 ± 2.01	81.94 ± 2.19
SH-SY5Y (Hypoxia)	4.41 ± 0.02	7.29 ± 0.29	85.54 ± 0.43

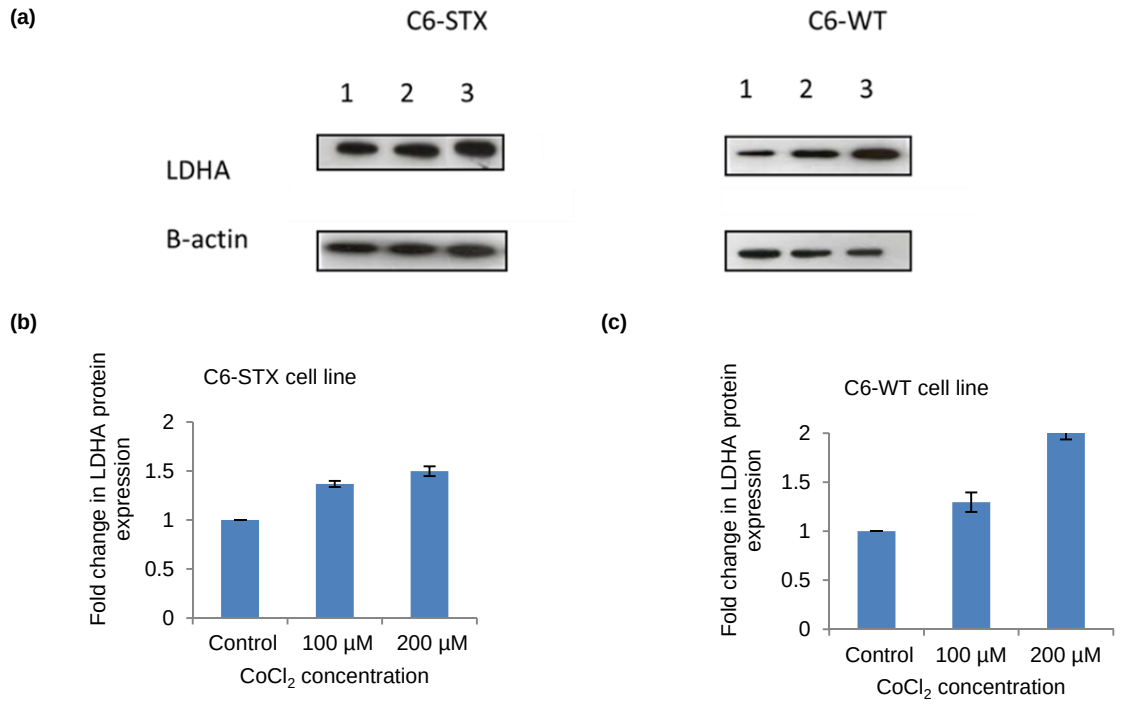
S2. **Percentage of annexin V staining of SH-SY5Y cells under hypoxic and normoxic conditions**

Supplementary data 3 (S3)



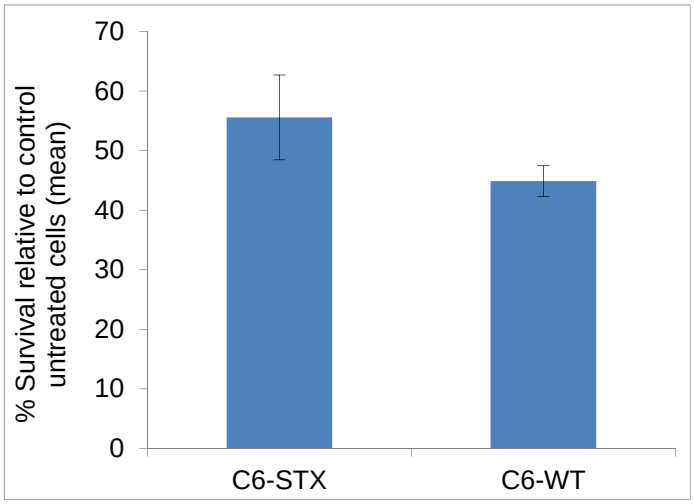
S3. **Migration of C6-STX and C6-WT cells following $CoCl_2$ treatment.** Wound size immediately and 16 hours after scratching illustrates wound closure of C6-STX and C6-WT cells with/without 100 µM $CoCl_2$.

Supplementary data 4 (S4)



S4. Effect of $CoCl_2$ treatment on C6 cell lines. (A) Expression of LDHA after treatment of C6-STX and C6-WT cells with different concentrations of $CoCl_2$. Lane 1 represents control untreated cells, lane 2 after 130 µM $CoCl_2$ and lane 3 after 200 µM $CoCl_2$. Results are representative of two independent experiments; (B) quantification of fold-change in LDHA expression for C6-STX cells after treatment with 100 µM $CoCl_2$ (16 hours) and 200 µM $CoCl_2$ (24 hours); (C) quantification of fold-change in LDHA expression of C6-WT after treatment with 100 µM $CoCl_2$ (16 hours) and 200 µM $CoCl_2$ (24 hours).

Supplementary data 5 (S5)



S5. Effect of HIF-1α induction on the survival of C6-STX and C6-WT cells. (P≥0.05, not significant)