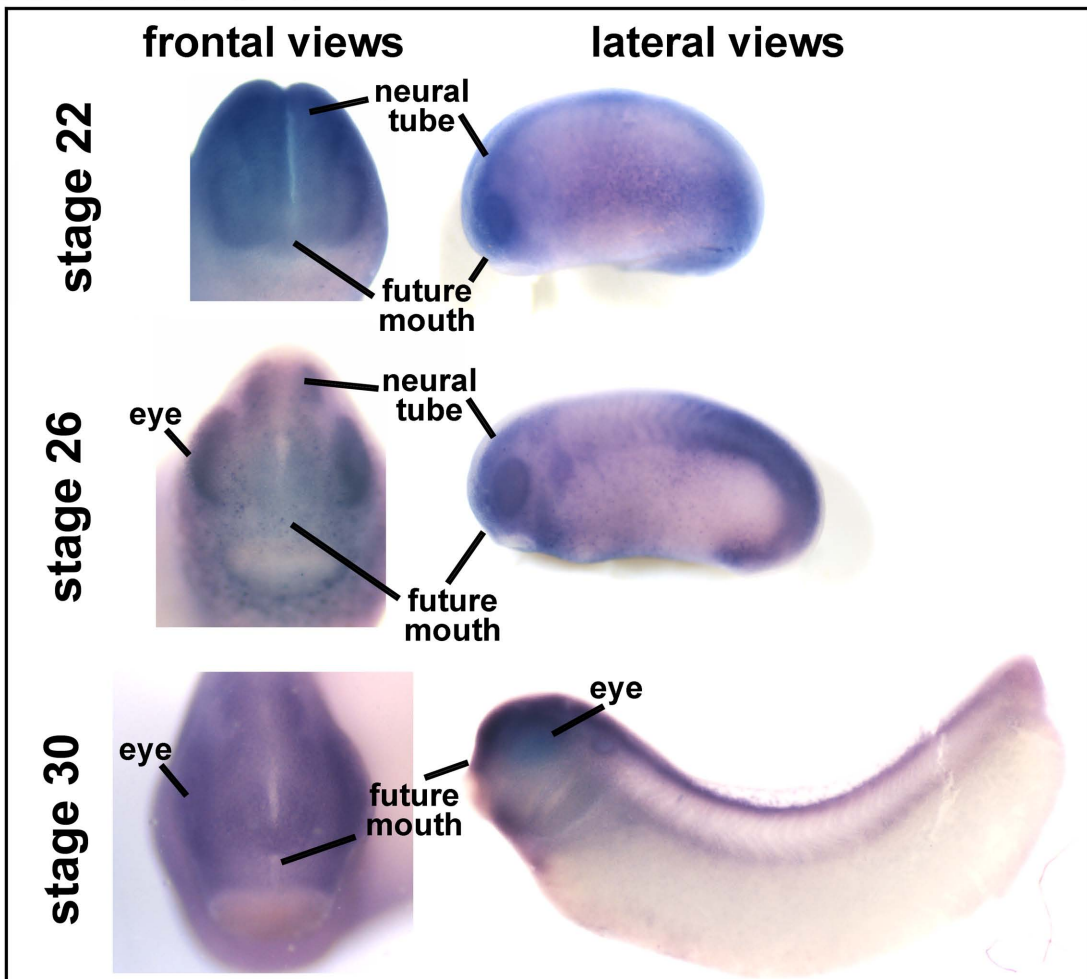
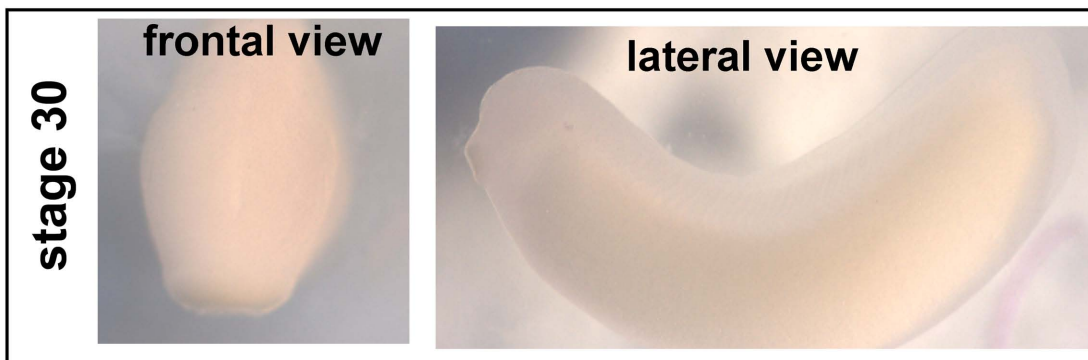


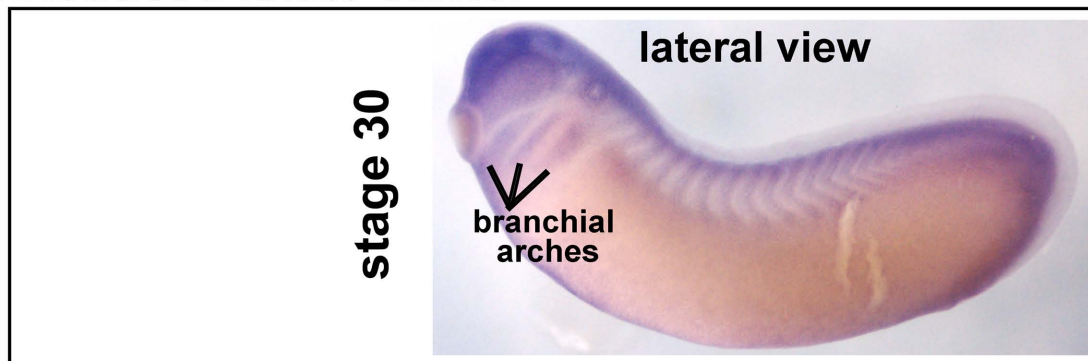
A. DHFR antisense



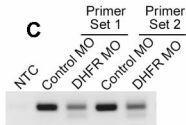
B. DHFR sense



C. Reduced folate carrier



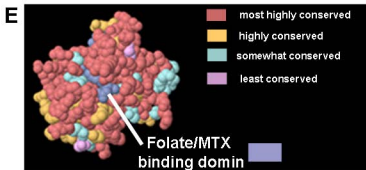
Target	Sequence
DHFR MO	5' AGAATGTGAACTGCACTGACCTTCA 3' Fluorescein



D DHFR protein sequence comparisons

Species	% Identity
<i>Mus Musculus</i>	90
<i>Rattus Norvegicus</i>	90
<i>Gallus Gallus</i>	75
<i>Xenopus Laevis</i>	65
<i>Xenopus Tropicalis</i>	65
<i>Danio rerio</i>	62

Species	% Identity	
	Folate Binding	NADP+ Binding
<i>Mus Musculus</i>	83	90
<i>Rattus Norvegicus</i>	83	90
<i>Gallus Gallus</i>	67	80
<i>Xenopus Laevis</i>	50	50
<i>Xenopus Tropicalis</i>	50	50
<i>Danio Rerio</i>	50	50



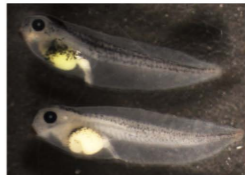
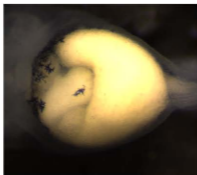
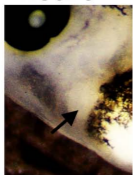
A. DHFR Morphants

heart

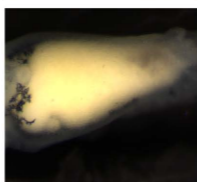
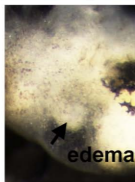
gut

length

CMO

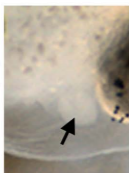


DHFR MO

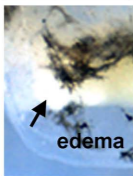


B. MTX treated

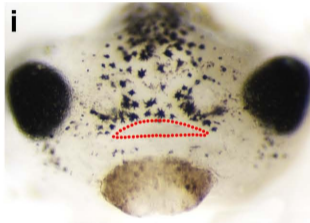
DMSO



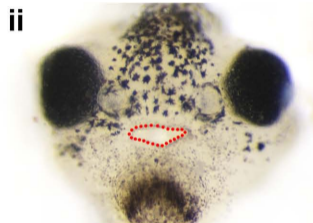
MTX



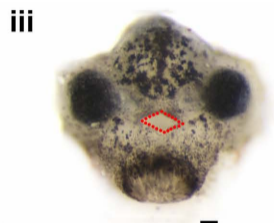
Normal



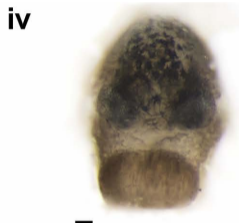
Mild



Moderate



Severe

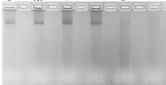


25%

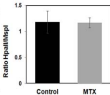
75%

Global DNA Methylation

Uncut HpaII cut MspI cut
C M C M C M



Quantification



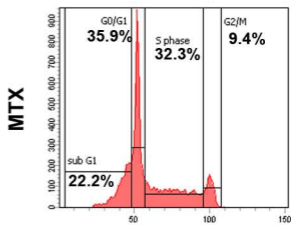
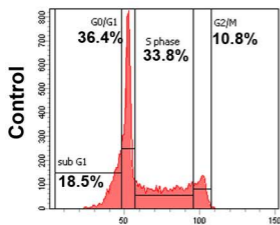
A stage 31/32

Sample	sub G1	G1/G0	S	G2/M
Control 1	6.4	51.4	29.1	12.3
Control 2	6.4	51.4	29.4	12.2
Control 3	18.5	36.4	33.8	10.8
Control 4	17.7	34.8	34.6	12.3
MTX 1	8.9	49.7	28.7	12.2
MTX 2	9.6	48.7	28.7	12.1
MTX 3	23	32.1	35.3	9.3
MTX 4	22.2	35.9	32.3	9.4

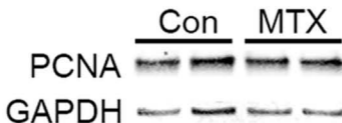
stage 35

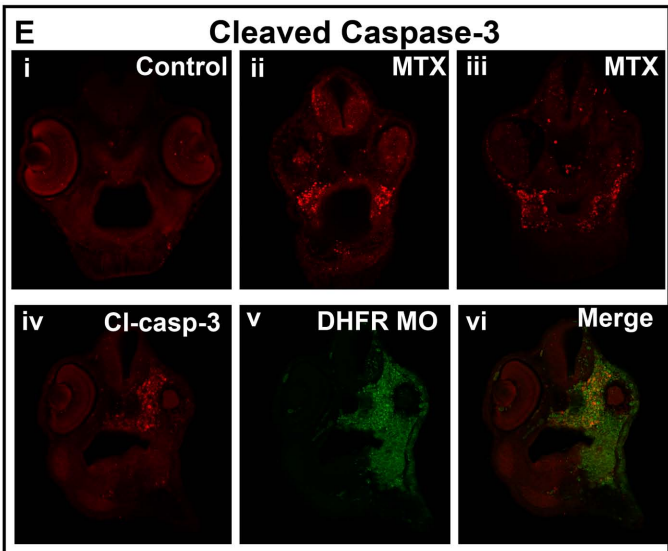
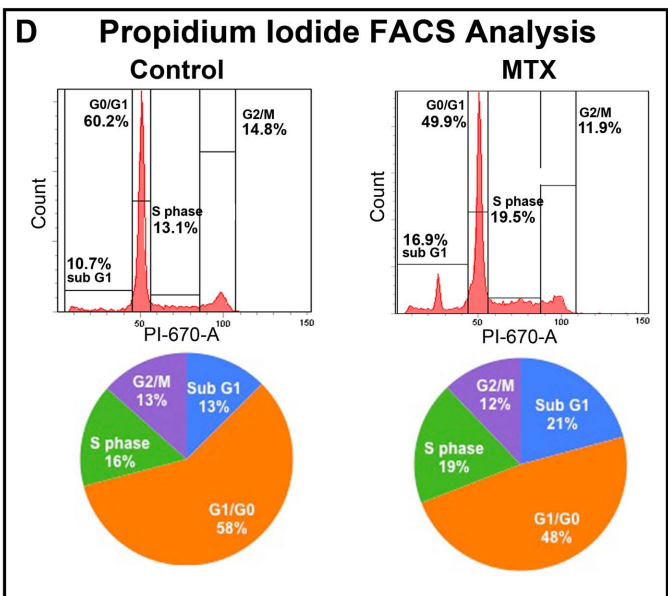
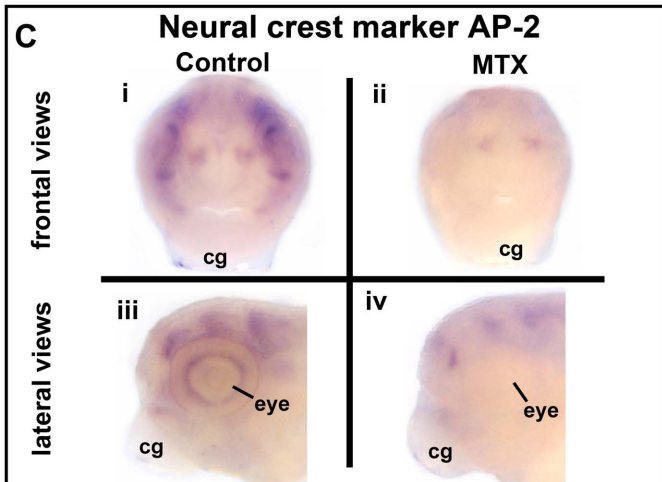
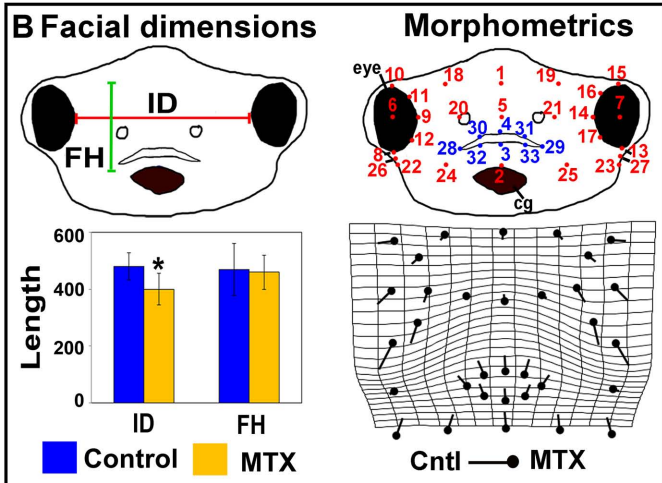
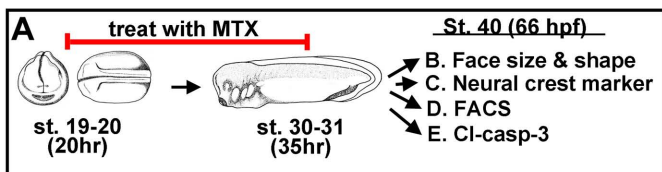
Sample	sub G1	G1/G0	S	G2/M
Control 1	13.9	39.3	24.2	10.1
Control 2	18.2	43	22.6	9.8
Control 3	13	47	27.2	10.9
Control 4	10.8	49.6	25.6	12.5
MTX 1	24.4	36.8	26	6.6
MTX 2	25.9	30	33.9	5.3
MTX 3	25.1	42.2	22.9	8.6
MTX 4	18	46.9	25.7	8.1

B Representative Cell Cycle Profiles st.31/32



C PCNA Western blot

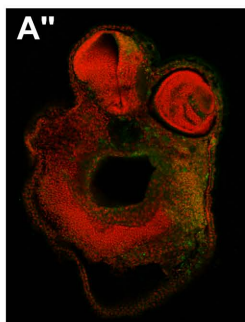
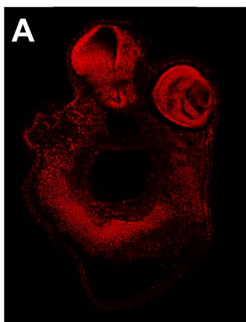




H3K4me3

DHFR MO FITC

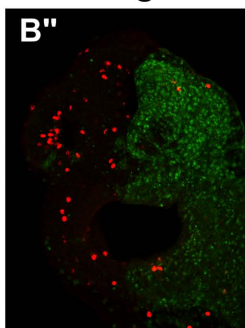
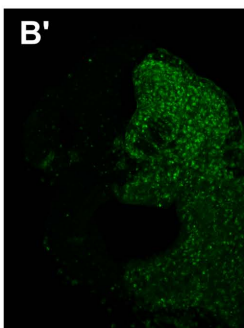
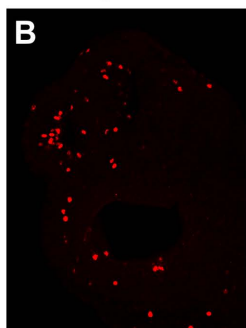
Merge



ph3

DHFR MO FITC

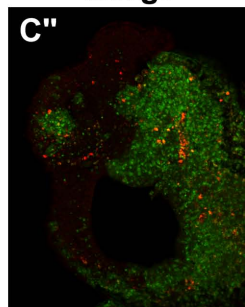
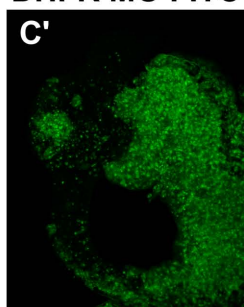
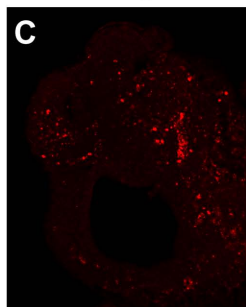
Merge



cl-casp.3

DHFR MO FITC

Merge



cl-casp.3

Cont MO FITC

Merge

