



Muscle growth markers in sexually dimorphic *Xiphophorus* fish

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Context and Procedure

- Goal: validate Pax3 and Pax7 primers
- Pax3 and Pax7 are orthologs and play roles in skeletal muscle tissue growth
- *Xiphophorus maculatus* is sexually dimorphic and have highly correlated growth characteristics and aging phenotypes



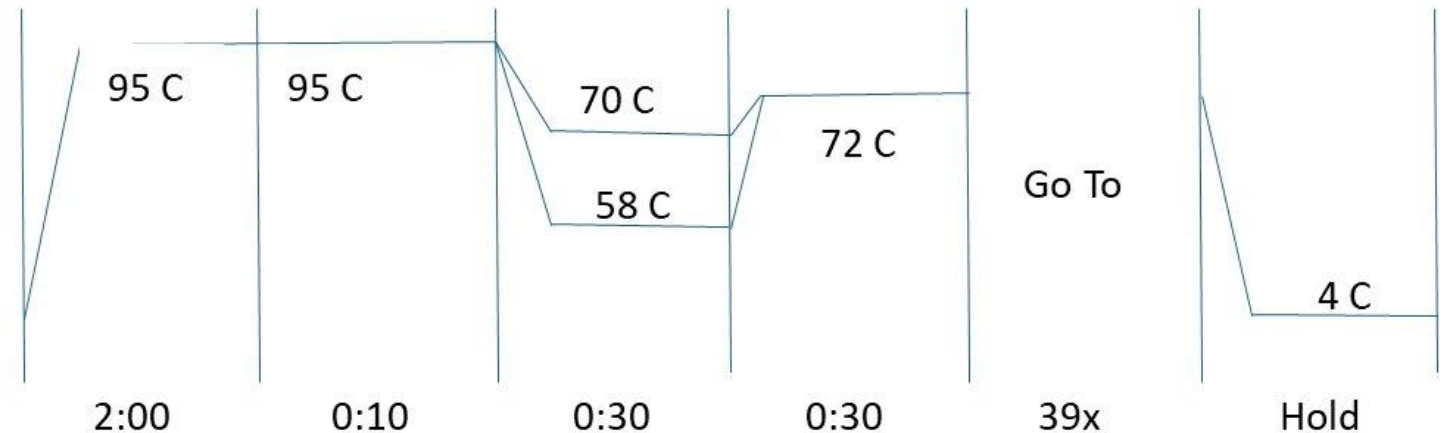
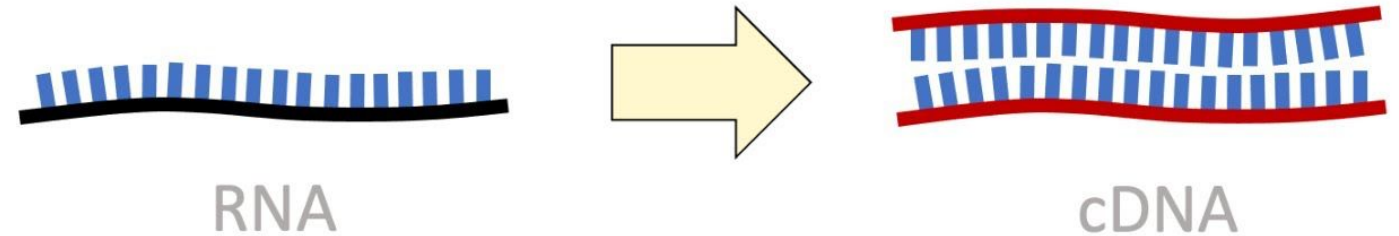
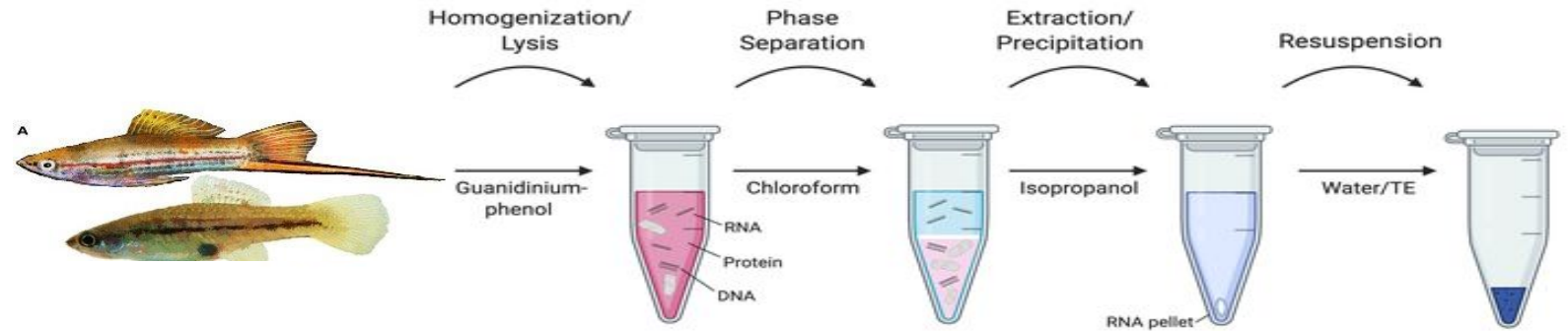


RNA isolation

cDNA synthesis

Temperature
gradient PCR

Validation





Results and Conclusion

Pax7 produced an amplicon of 317 base pairs, which is validated in this gel at 68.5 degrees C.

Results

- I was not able to validate Pax3 primers
- I did validate Pax7!

Future Research

- Validate Pax3 primer
- Clone plasmids
- qPCR