



## Superoxide levels [↗](#)

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PLOS Genetics

[Sam Towarnicki](#)<sup>1</sup>

<sup>1</sup>University of New South Wales

[dx.doi.org/10.17504/protocols.io.ufuetnw](https://doi.org/10.17504/protocols.io.ufuetnw)

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### EXTERNAL LINK

<https://doi.org/10.1371/journal.pgen.1007735>

### THIS PROTOCOL ACCOMPANIES THE FOLLOWING PUBLICATION

Aw WC, Towarnicki SG, Melvin RG, Youngson NA, Garvin MR, Hu Y, Nielsen S, Thomas T, Pickford R, Bustamante S, Vila-Sanjurjo A, Smyth GK, Ballard JWO (2018) Genotype to phenotype: Diet-by-mitochondrial DNA haplotype interactions drive metabolic flexibility and organismal fitness. PLoS Genet 14(11): e1007735. doi: [10.1371/journal.pgen.1007735](https://doi.org/10.1371/journal.pgen.1007735)

### PROTOCOL STATUS

**Working**

- 1 Larvae were dissected in PBS to produce muscle fillets.
- 2 Fillets were incubated in 20 mM 2',7'-dichlorodihydrofluorescein diacetate (H2DCFDA) for 30 m at 23° C.
- 3 Fillets were washed twice in PBS, fixed in 2% paraformaldehyde for 10 minutes at 23° C, mounted on glass slides and imaged by confocal laser scanning microscopy at 495/520 nm (Excitation/Emission).
- 4 Pixel intensity was measured by ImageJ (<https://imagej.nih.gov/ij/>) using the nikon6D plugin.



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