FEB 13, 2019

Fluorescence-based Thermal Shift Assay (TSA)

PLOS One

Paloma
Varela¹

¹Institute for Integrative Biology of the Cell, CEA, CNRS, Université Paris-Saclay, Gif-sur-Yvette, France

Paloma Varela

OPEN ACCESS

DOI:

[dx.doi.org/10.17504/protocols.io.vg2e3ye](https://doi.org/10.17504/protocols.io.vg2e3ye)

External link:

<https://doi.org/10.1371/journal.pone.0210123>

Protocol Citation: Paloma Varela 2019. Fluorescence-based Thermal Shift Assay (TSA). **protocols.io** <https://dx.doi.org/10.17504/protocols.io.vg2e3ye>

MANUSCRIPT CITATION:

Varela PF, Velours C, Aumont-Niçaise M, Pineau B, Legrand P, Poquet I (2019) Biophysical and structural characterization of a zinc-responsive repressor of the MarR superfamily. PLoS ONE 14(2): e0210123. doi: [10.1371/journal.pone.0210123](https://doi.org/10.1371/journal.pone.0210123)

License: This is an open access protocol distributed under the terms of the [Creative Commons Attribution License](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working

MATERIALS

Thermal stability of fully purified ZitR_{MG} protein was calculated by induced thermal denaturation using a Q-PCR ABI Prism® 7900HT (CTPF platform, IMAGIF). We used Sypro Orange dye, which non-specifically binds to hydrophobic surfaces and can be measured at 488 nm. Purified ZitR_{MG} protein (2.5 mg) was analyzed under different conditions of buffer (Tris, phosphate, HEPES and MES), pH (ranging from 9.2 to 4), salt (NaCl up to 350 mM), and glycerol concentrations (up to 10 %) (data not shown).

Created: Nov 09, 2018

Last Modified: Feb 13, 2019

PROTOCOL integer ID:
17658