

ColorFlux

A visual indicator of bacterial efflux



ColorFlux is a fast, reliable and non-toxic solution for assessing bacterial efflux. This coloured fluorescent compound quickly accumulates within bacteria as a function of their efflux pump activity.

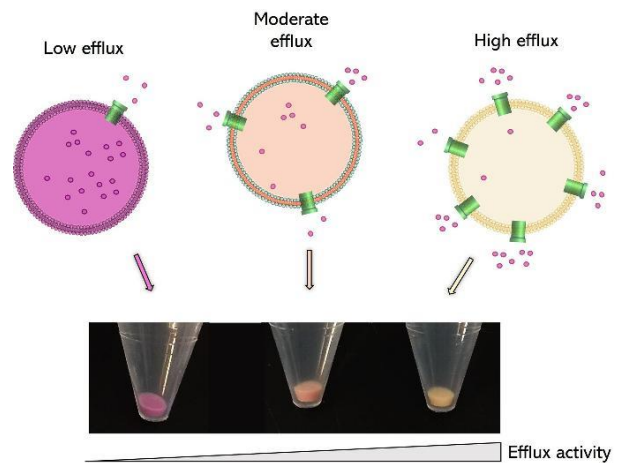
Key features

ColorFlux staining was shown to reflect the activity of well-characterized efflux pumps from the major facilitator superfamily and ATP-binding cassette families in a variety of Gram+ bacteria:

- **NorA, MepA, MepB, PatA, PatB**
(*Staphylococcus aureus* & *Streptococcus pneumoniae*)
- **BmrA** (*Bacillus Subtilis*)

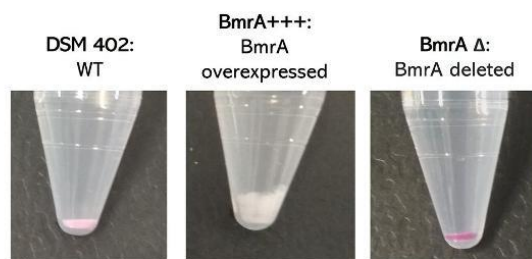
Detection methods: visual & fluorescence.
Also compatible with single-cell approaches
(live imaging and flow cytometry)

Simply add ColorFlux to your bacteria and watch them change colour !



Results

ColorFlux staining of BmrA mutants in Bacillus Subtilis



Top picture shows pellet colour variations according to BmrA expression. Bottom figures show the fluorescence signals detected for each strain using an Ex=530nm.

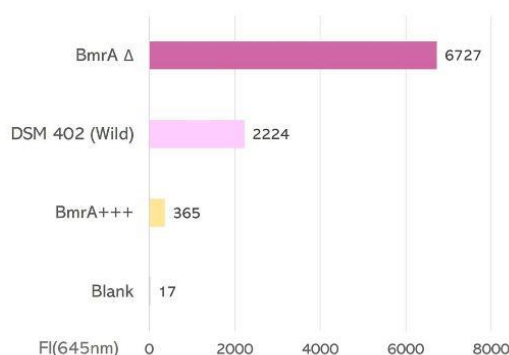
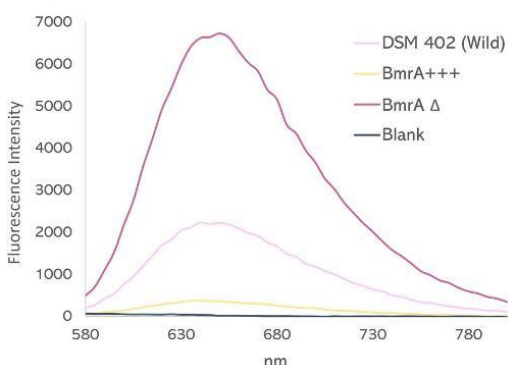


Image credit: Mrunal Patil & Jean-Michel Bolla, Aix-Marseille Université - 2023