Supplementary Figure 1: *E. coli* BW25113 fluorescence signals for 143 fluorophores. The signals for the non-dye control (Autofluorescence) and all fluorophores (log_{10} values, Y-axis) are compiled for each of the 13 channels of the Intellicyt® flow cytometer (X-axis). The median for autofluorescence (orange bars) is drawn for every channel. Colour coded distribution of data by concentration of fluorophore (micromolar) are shown. The subtitles contain our internal code (Fxxx). The number of biological replicates (***n***) for each fluorophore at a given concentration represent data from different experiments carried out over a period of five months.

Supplementary Figure 2. Compilation of the fluorescence detected for 143 fluorescent molecules by the Intellicyt® in *E. coli* BW25113. A: Density distribution of the fluorescence of the full set of fluorophores (blue dash line) using their individual optimal excitation-emission channels at their optimal concentrations (as in Supplementary Table 1). **B**: The signals for all fluorophores are compiled against autofluorescence for each channel. Colour-coded distribution of data by concentration of fluorophore (micromolar) are shown. Orange bar: median value of autofluorescence (note that some dyes can quench autofluorescence). **C**: Density distribution after autofluorescence data were subtracted. The median fluorescence was reduced (blue dash line moved to the left) as a consequence of the subtraction of the autofluorescence. **D**: New spread of the signals distribution for all fluorophores for the 13 channels after subtracting autofluorescence. Colour-coded distribution of data by concentration of fluorophore (micromolar).

Supplementary Figure 3: Dose-response fluorophore uptake. Regression analysis for each of the initial 47 fluorophores that had a two-fold or higher activity (in terms of median values of uptake) in *E. coli* BW25113. Locally weighted scatterplot smoothing was applied to fluorescence signal versus fluorophore concentration data. X-axis: the log_{10} of the concentrations in micromolar. Y-axis: the log_{10} of fluorescence signals. The subtitles contain the relevant channel for each fluorophore and our internal code (Fxxx).

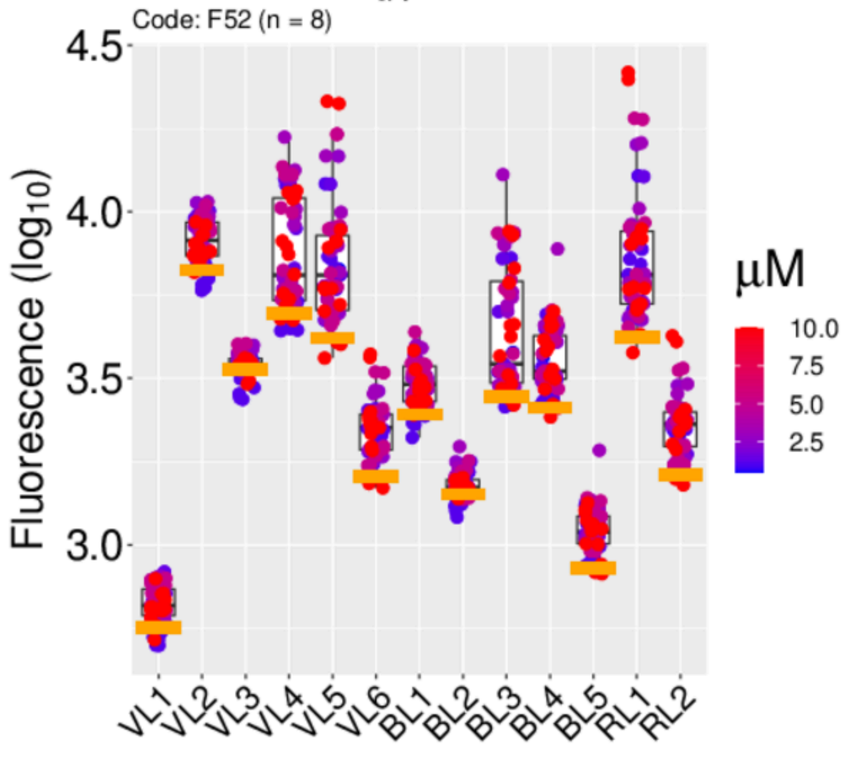
Supplementary Figure 4: Effect of pH and CPZ on the uptake of 40 fluorophores. *E. coli* BW25113 (10^6 cells.mL^{-1}) were incubated with 3 µM fluorophores for 15 minutes at 37ºC (red lines). Similar samples were incubated with both 3 µM fluorophores and 10µM CPZ under the same experimental conditions (blue lines). The incubations were carried out at different pH values: 6.0, 6.5, 7.0, 7.5, 8.0, and 8.5. X-axis: pH values. Y-axis: log_{10} of fluorescence signals after locally weighted scatterplot smoothing.

Supplementary Figure 5: Effect of *yhjV* deletion on fluorophore uptake in *E. coli* BW25113. Fluorescence signals are presented as the log_{10} of ratios of the fluorescence from the *yhjV* knock out cells (Δ*yhjV*) over the fluorescence signals from the reference cells (BW25113). X-axis: log_{10} of the ratios (log_{10} = 0). No difference between the two strain would have a ratio of 1 (log_{10} = 0). Boxplots are ordered by median (highest on top of the plot). The legend lists the concentrations used for each fluorophore. The legend lists the concentrations used for each fluorophore. The clearly related structures of the two most differentiating dyes from the palette of 39 are shown.

Supplementary Figure 6: Differential uptake of 39 dyes between three different knockout strain of *E. coli*. Experiments were performed as described in the legends to Supplementary Figure 5 and 11 Figure 9, and in Table 2. Several dyes showing the largest effect in Δ*yihN* are marked.

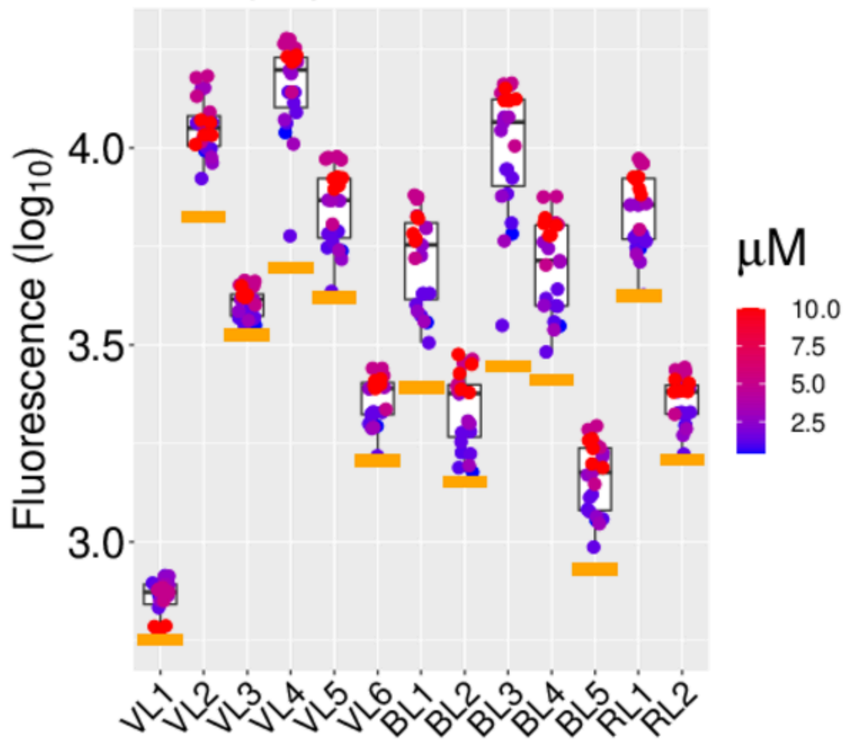
1,4–Diketo–3–((4–[N–(3,5–dichloro–4–hydroxyphenyl)amino]sulfonyl)phenyl)–6–phenylpyrrolo[3,4–c]pyrrole

Code: F52 (n = 8)



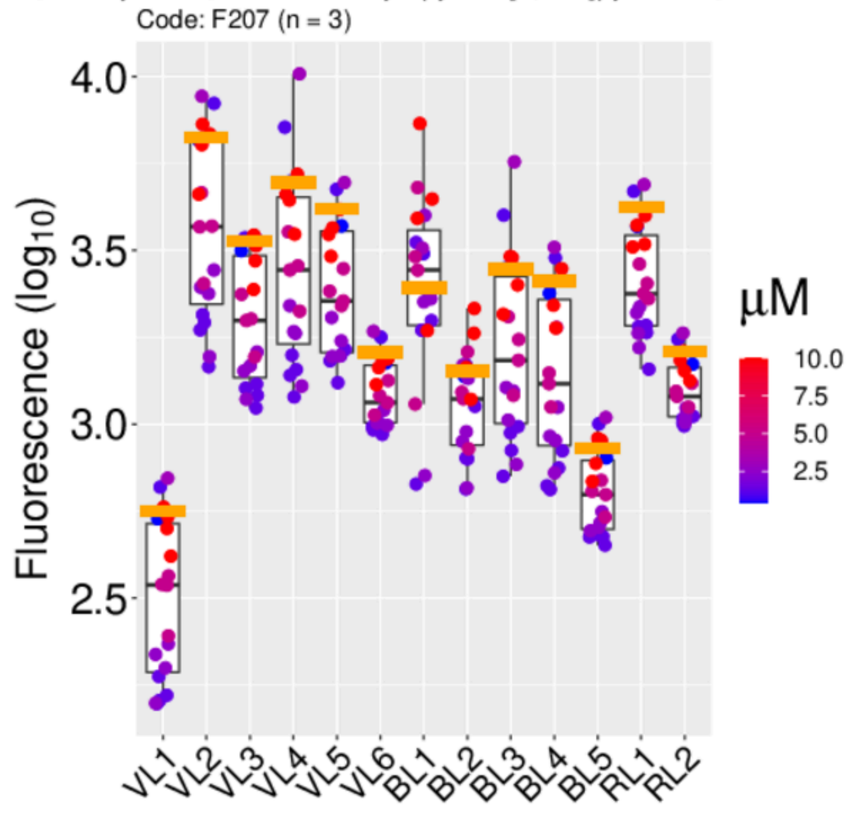
2–(N–(7–Nitrobenz–2–oxa–1,3–diazol–4–yl)Amino)–2–Deoxyglucose

Code: F1 (n = 3)



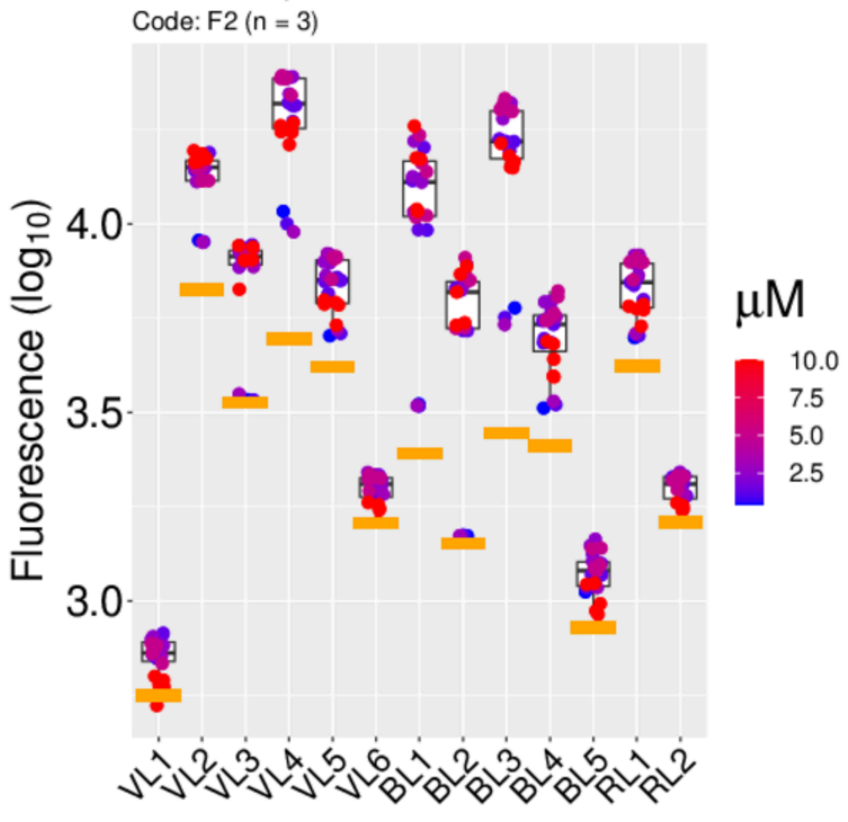
2,5–Dihydro–3,6–di–2–thienyl–pyrrolo[3,4–c]pyrrole–1,4–dione

Code: F207 (n = 3)



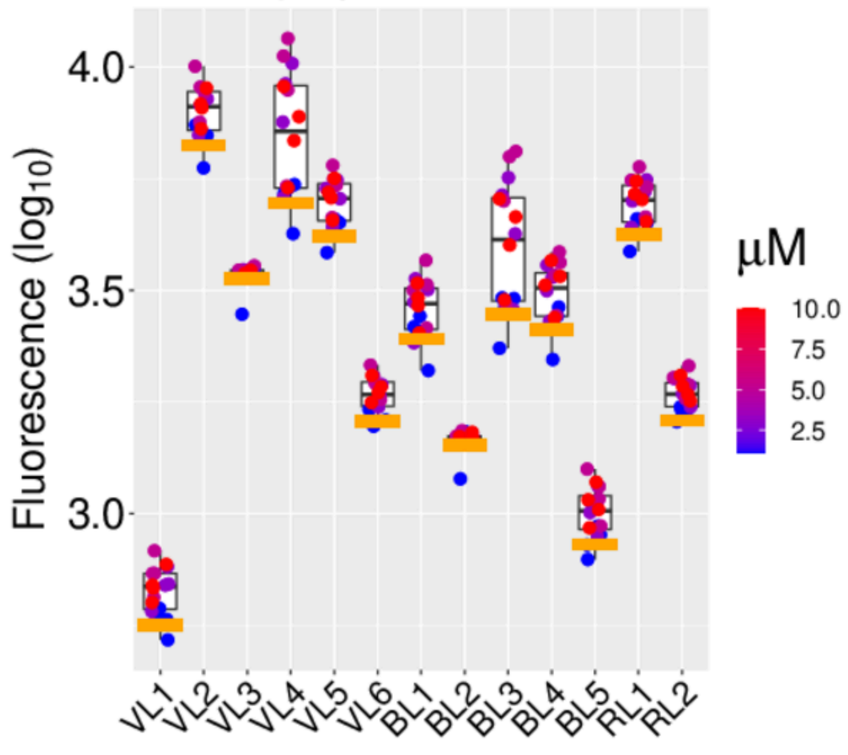
2',7'–Dichlorofluorescein

Code: F2 (n = 3)



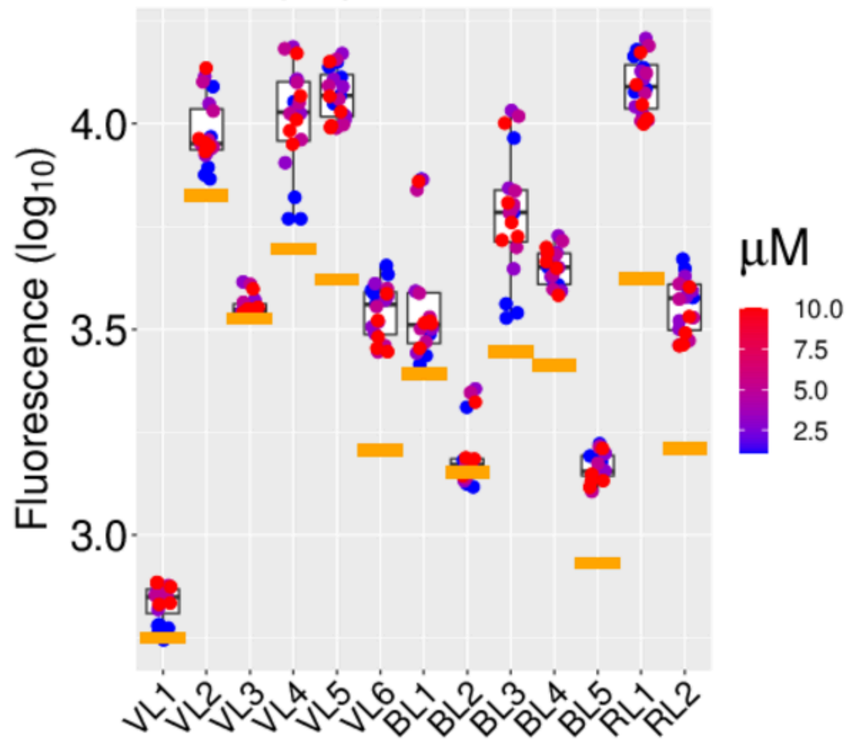
3,6–Bis(4–biphenylyl)–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F225 (n = 4)



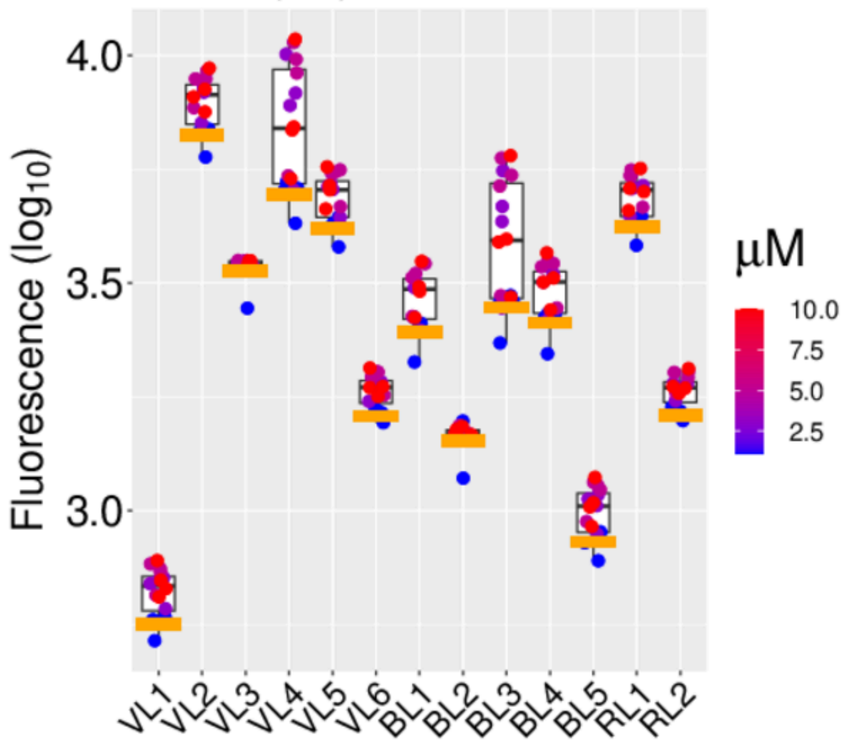
3,6–Bis(4–chlorophenyl)–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F222 (n = 5)



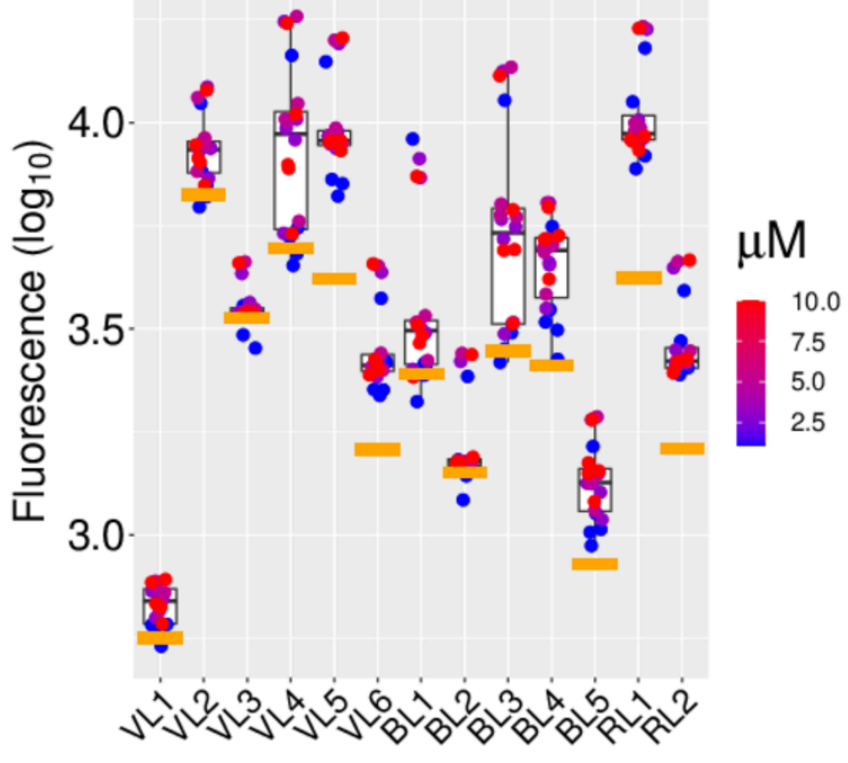
3,6–Bis(4–tert–butylphenyl)–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F223 (n = 4)



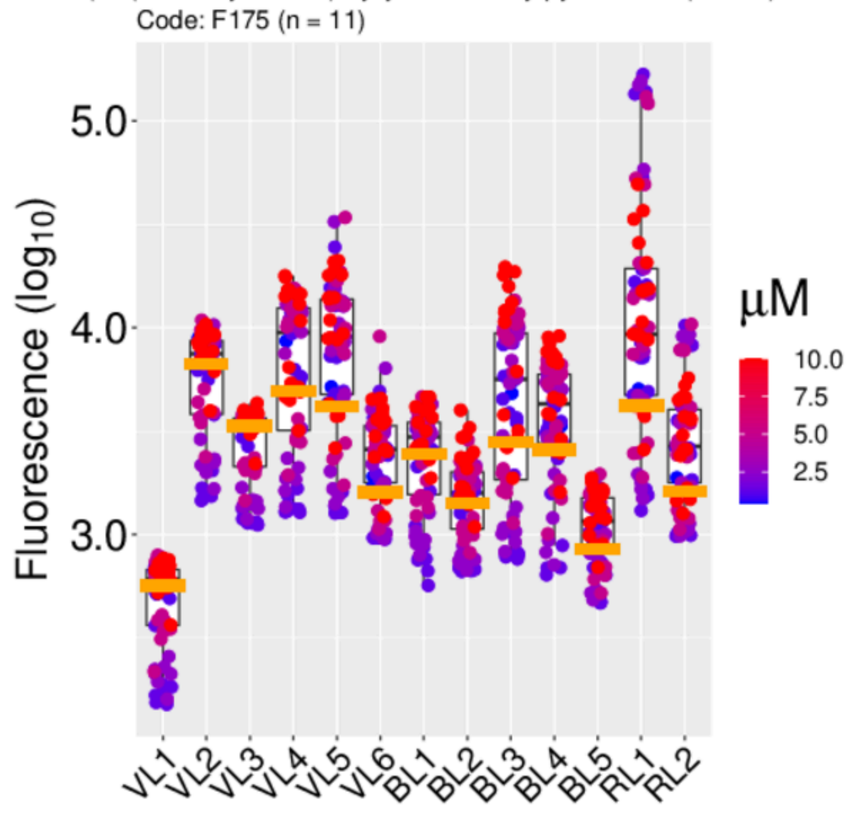
3,6–Diphenyl–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F221 (n = 5)



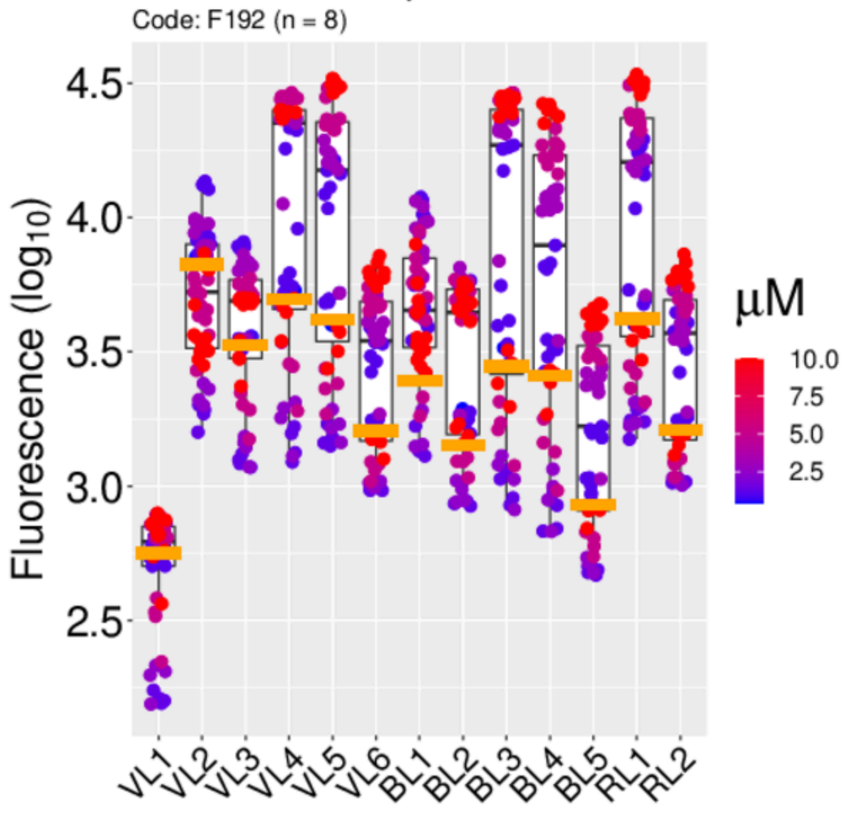
4–(4–(Dimethylamino)styryl–N–methylpyridinium (ASP+)–

Code: F175 (n = 11)



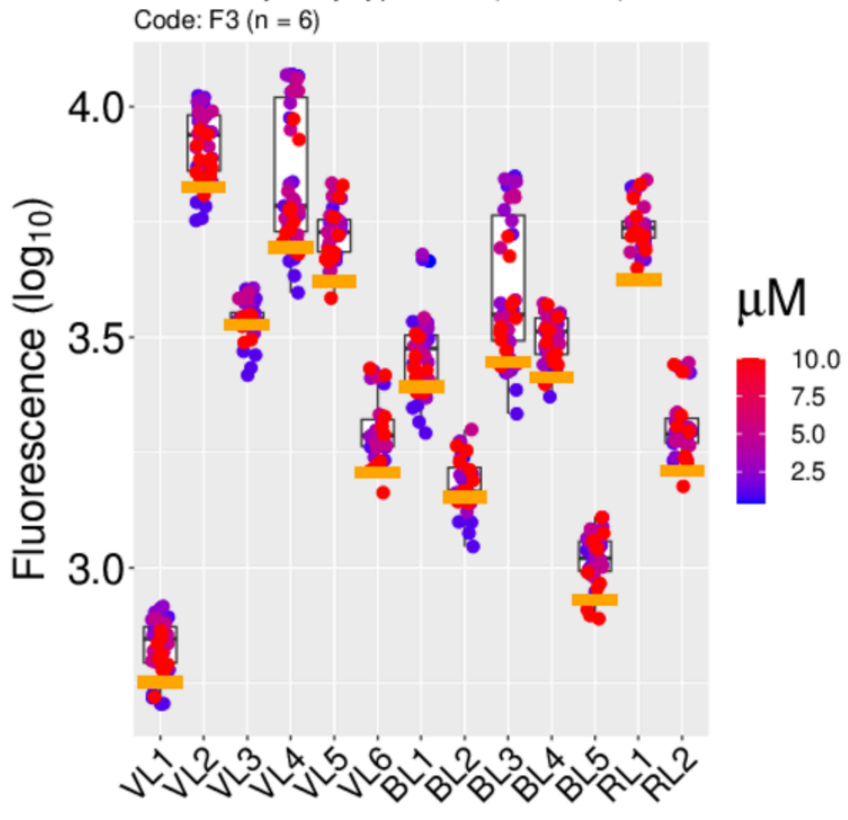
5–Carboxyfluorescein

Code: F192 (n = 8)



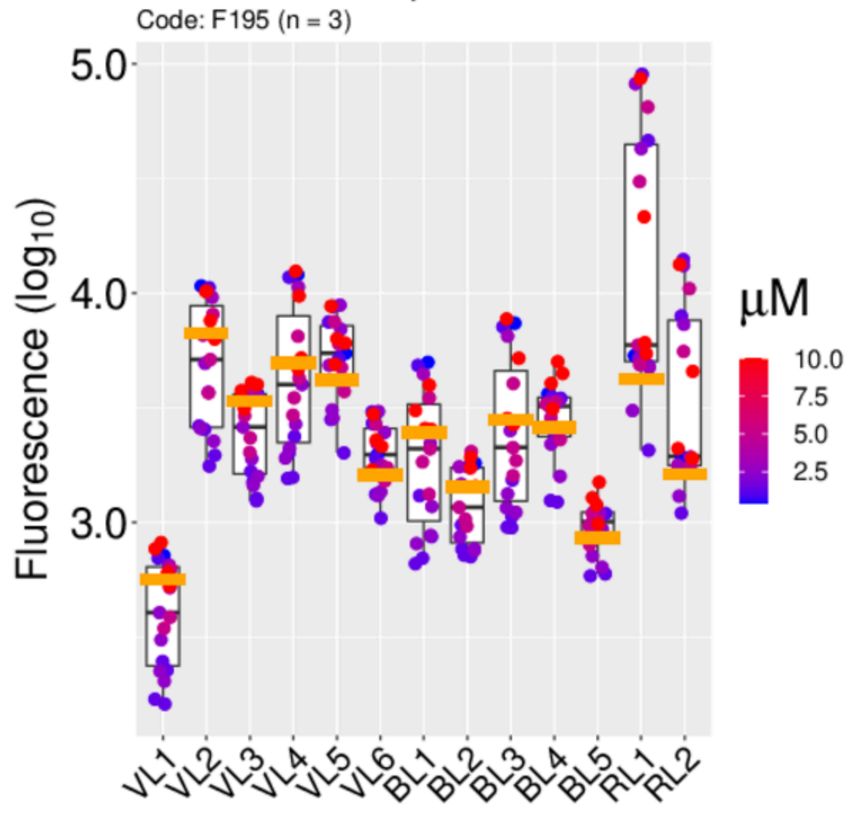
5–hydroxytryptamine (serotonin)

Code: F3 (n = 6)



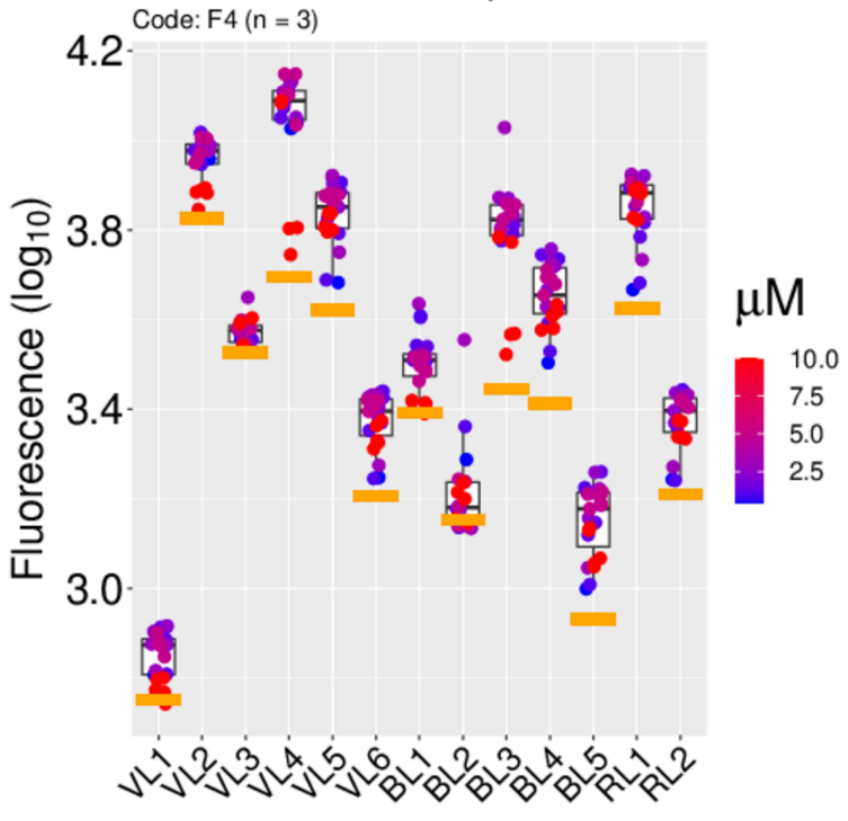
6–Carboxyfluorescein

Code: F195 (n = 3)



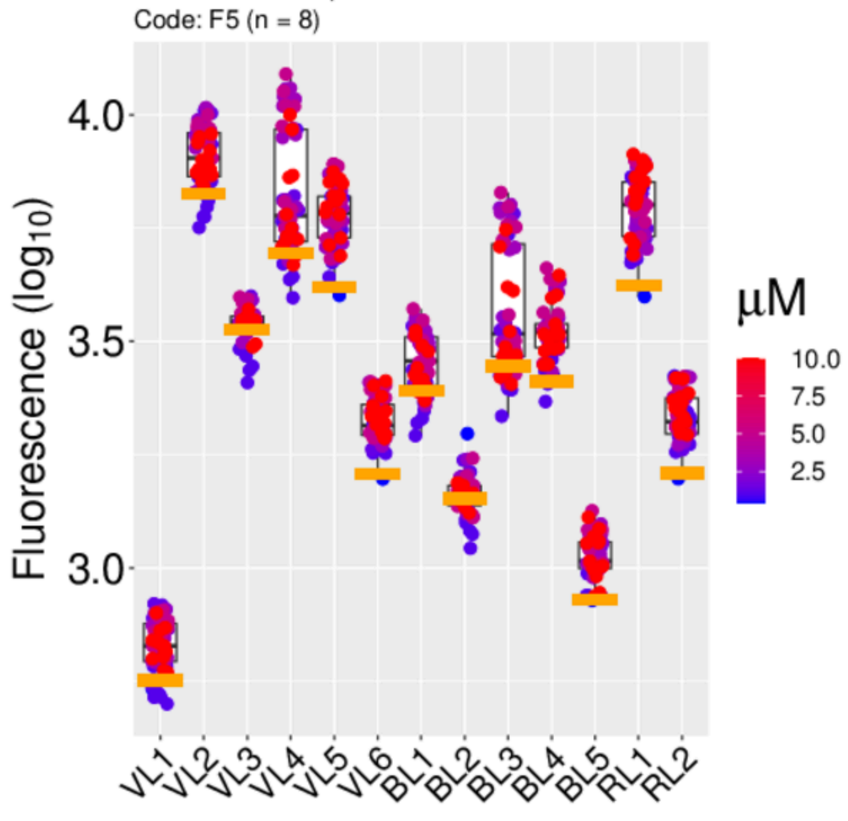
7–Aminoactinomycin D

Code: F4 (n = 3)



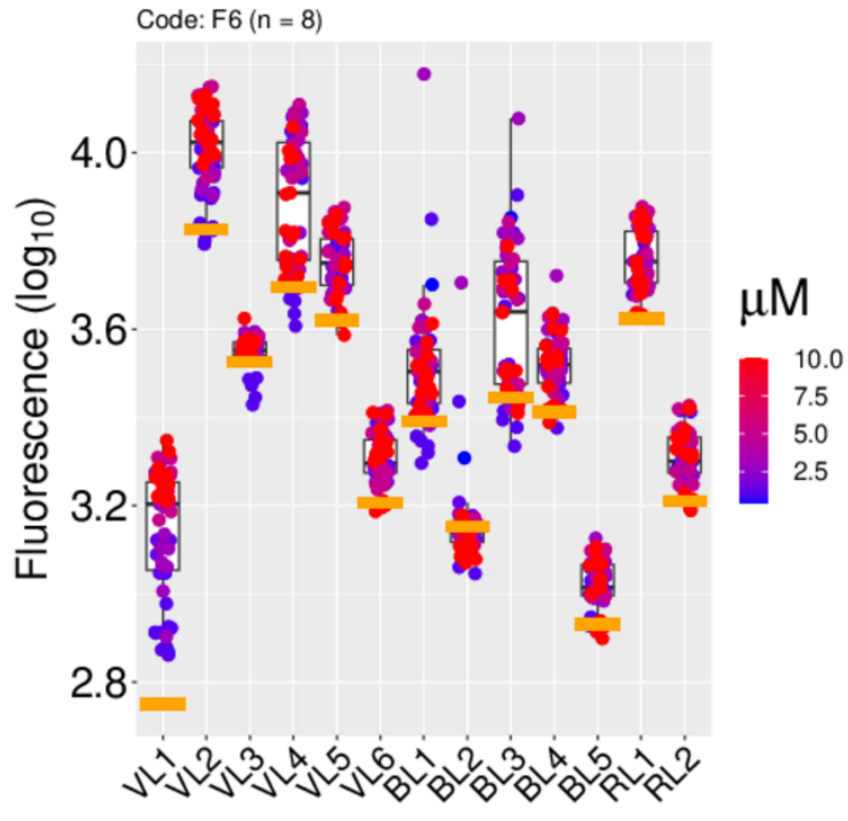
8–Anilinonaphthalene–1–sulfonic acid

Code: F5 (n = 8)



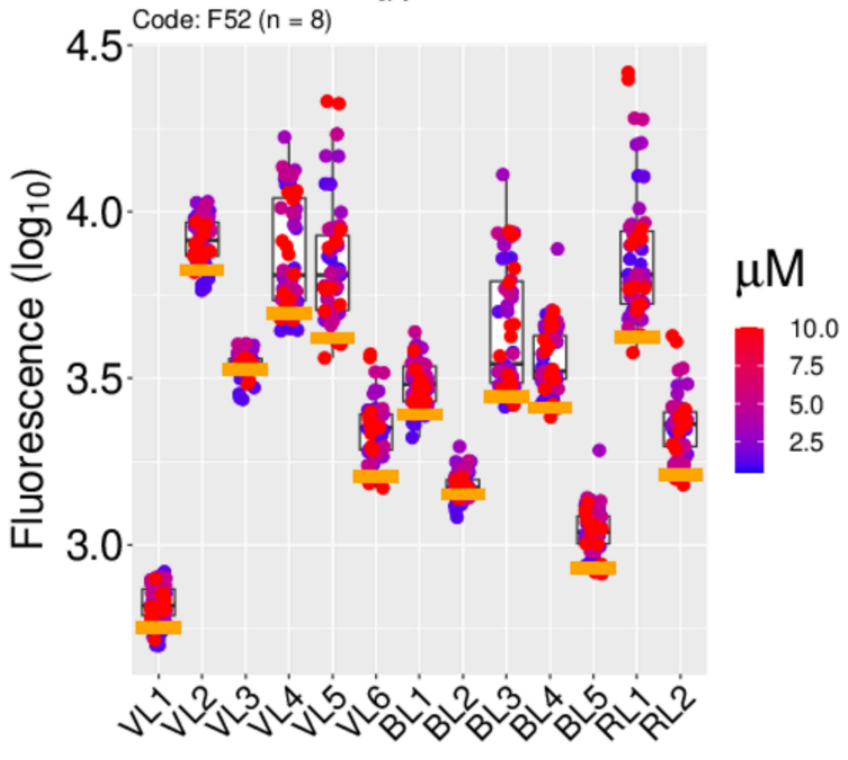
9–aminoacridine

Code: F6 (n = 8)



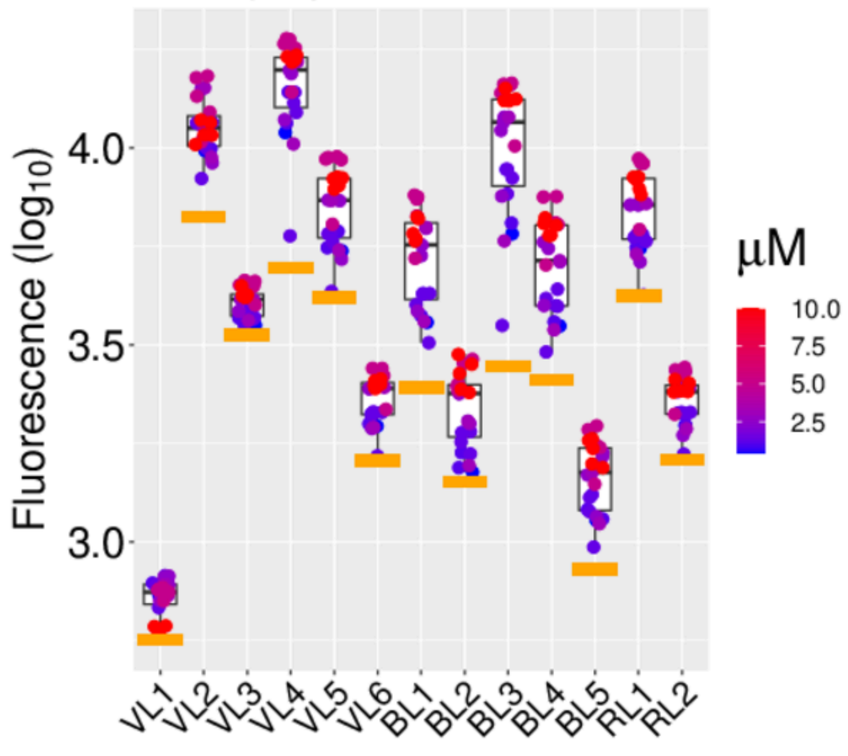
1,4–Diketo–3–((4–[N–(3,5–dichloro–4–hydroxyphenyl)amino]sulfonyl)phenyl)–6–phenylpyrrolo[3,4–c]pyrrole

Code: F52 (n = 8)



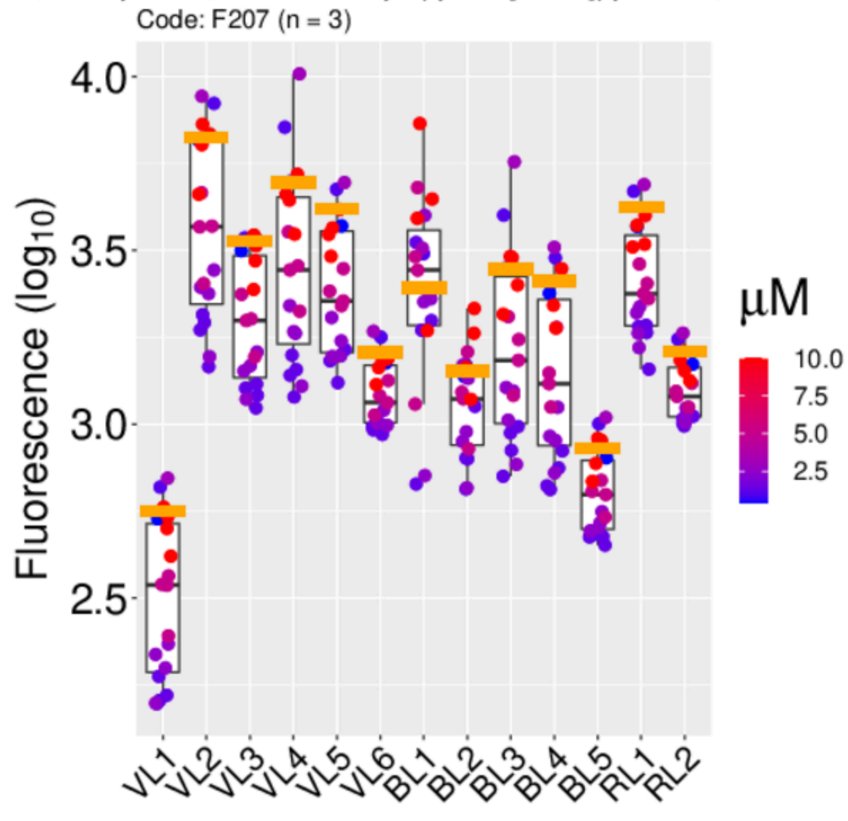
2–(N–(7–Nitrobenz–2–oxa–1,3–diazol–4–yl)Amino)–2–Deoxyglucose

Code: F1 (n = 3)



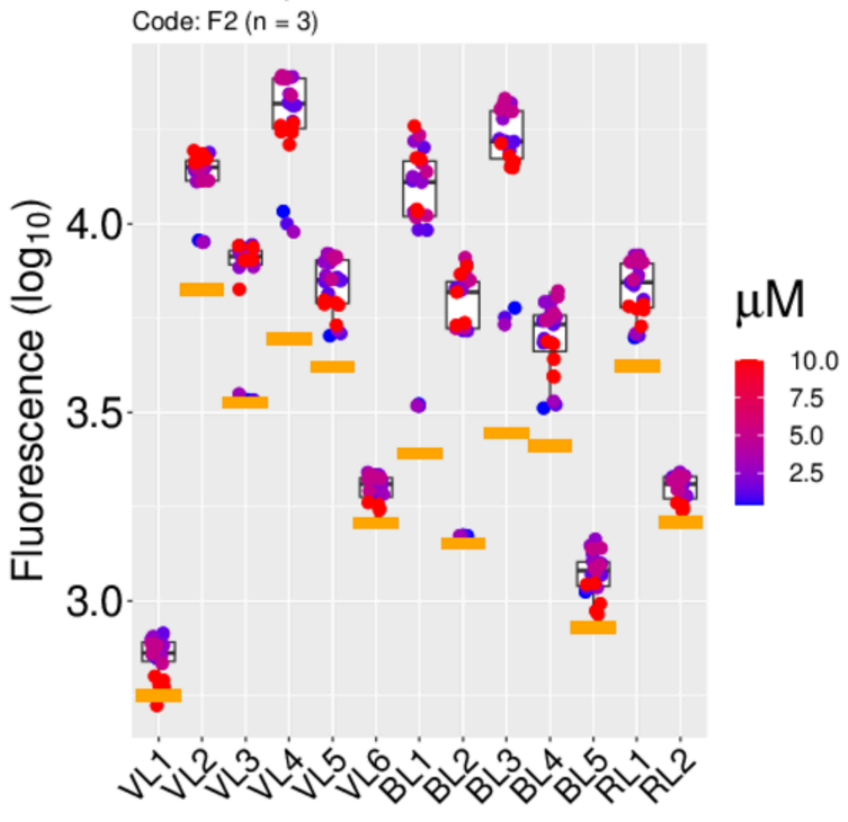
2,5–Dihydro–3,6–di–2–thienyl–pyrrolo[3,4–c]pyrrole–1,4–dione

Code: F207 (n = 3)



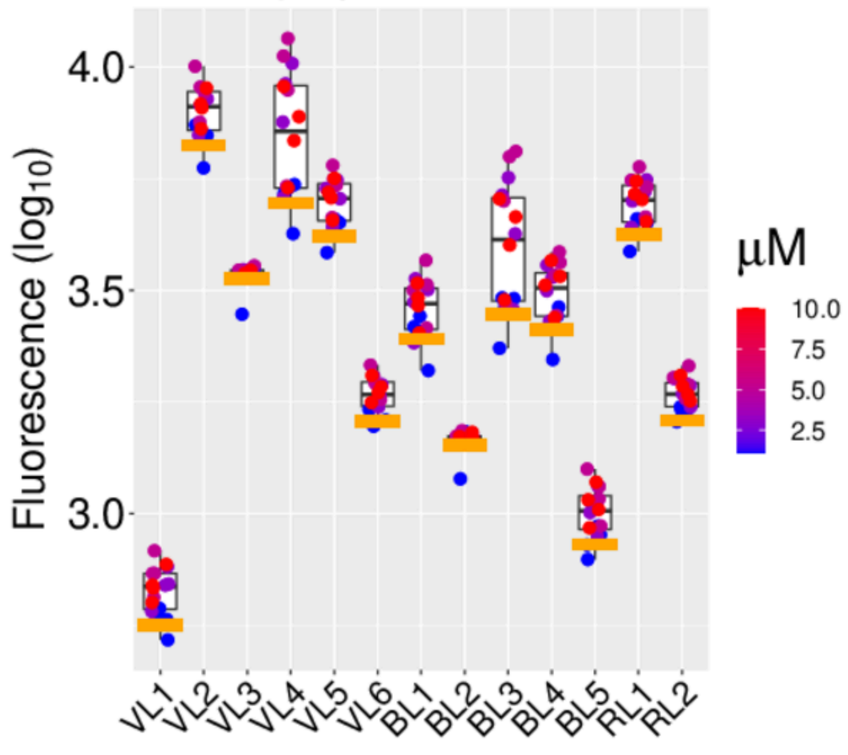
2',7'–Dichlorofluorescein

Code: F2 (n = 3)



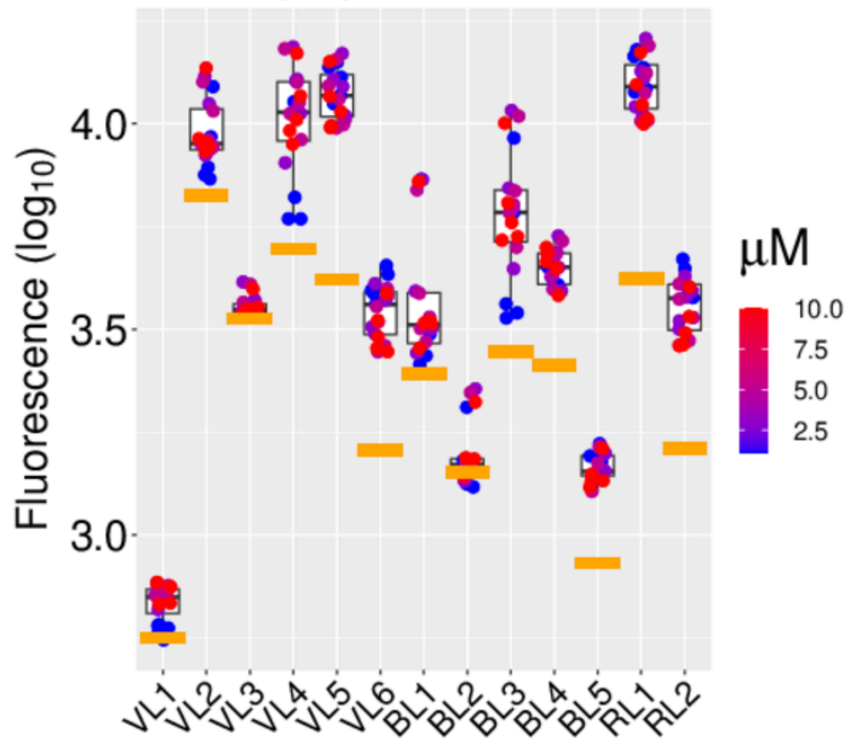
3,6–Bis(4–biphenylyl)–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F225 (n = 4)



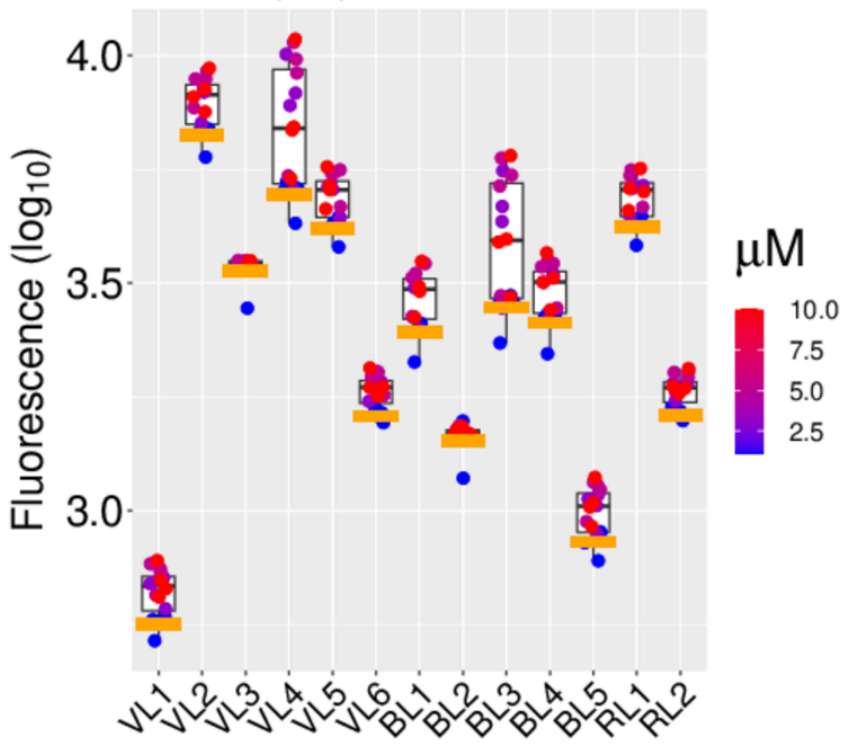
3,6–Bis(4–chlorophenyl)–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F222 (n = 5)



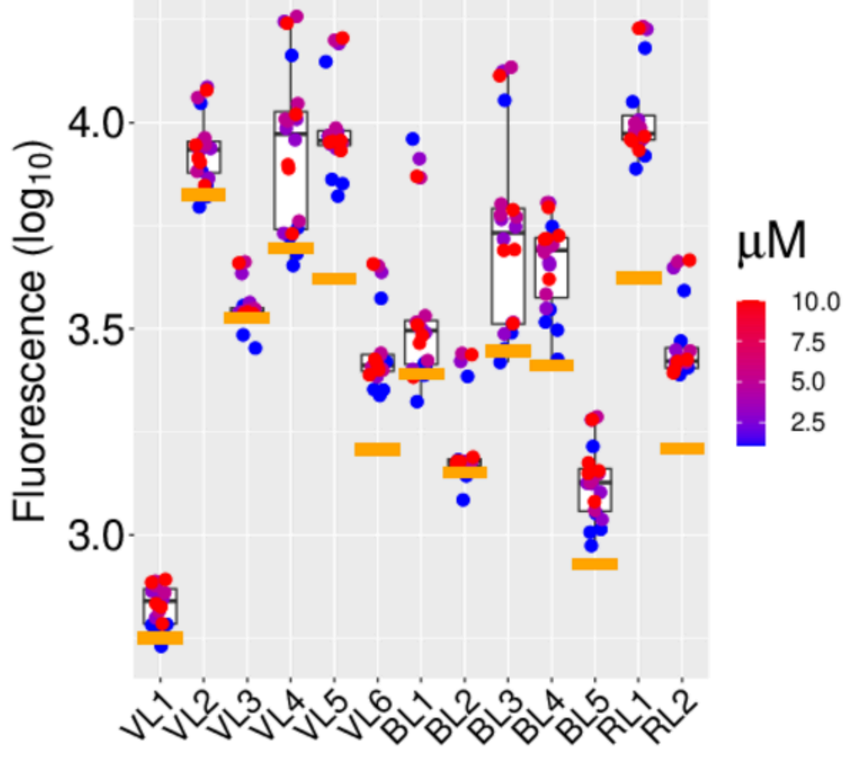
3,6–Bis(4–tert–butylphenyl)–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F223 (n = 4)



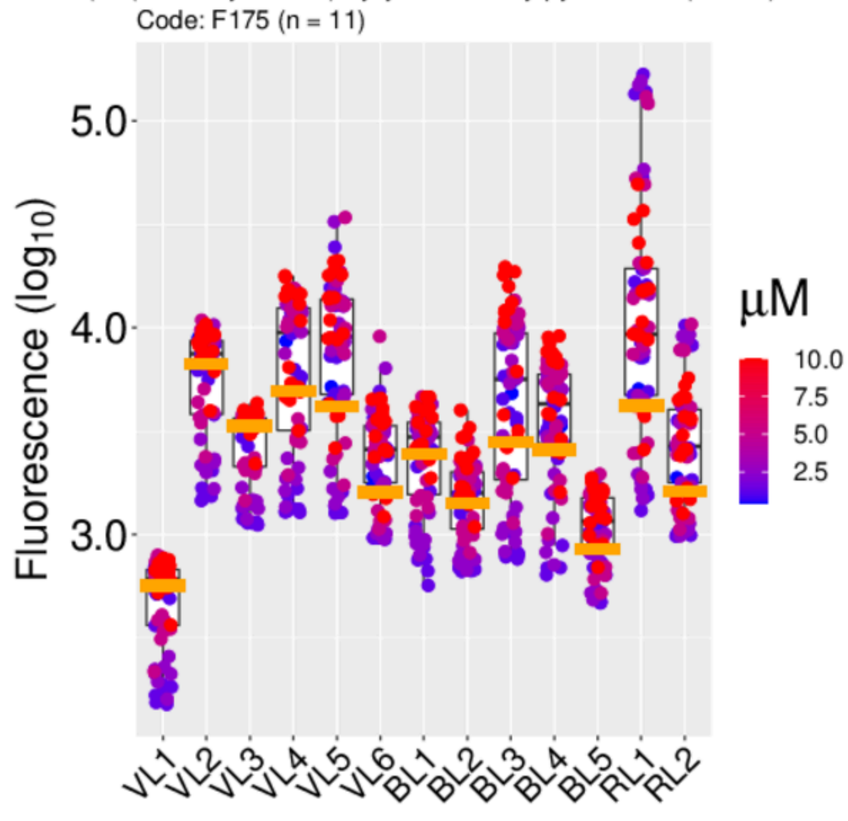
3,6–Diphenyl–2,5–dihydropyrrolo[3,4–c]pyrrole–1,4–dione

Code: F221 (n = 5)



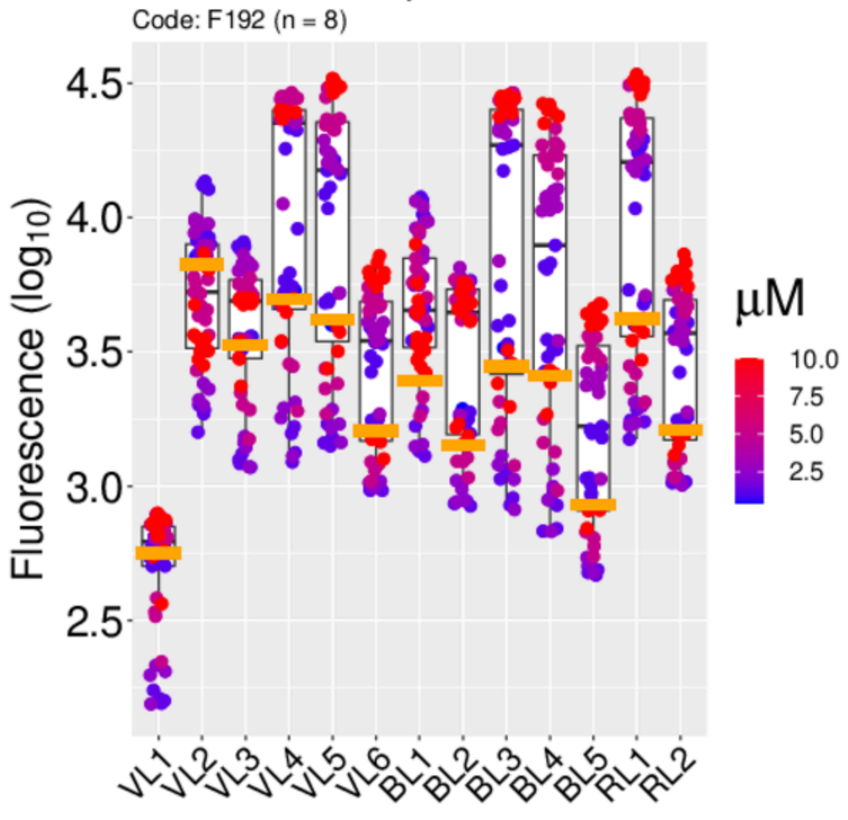
4–(4–(Dimethylamino)styryl–N–methylpyridinium (ASP+)–

Code: F175 (n = 11)



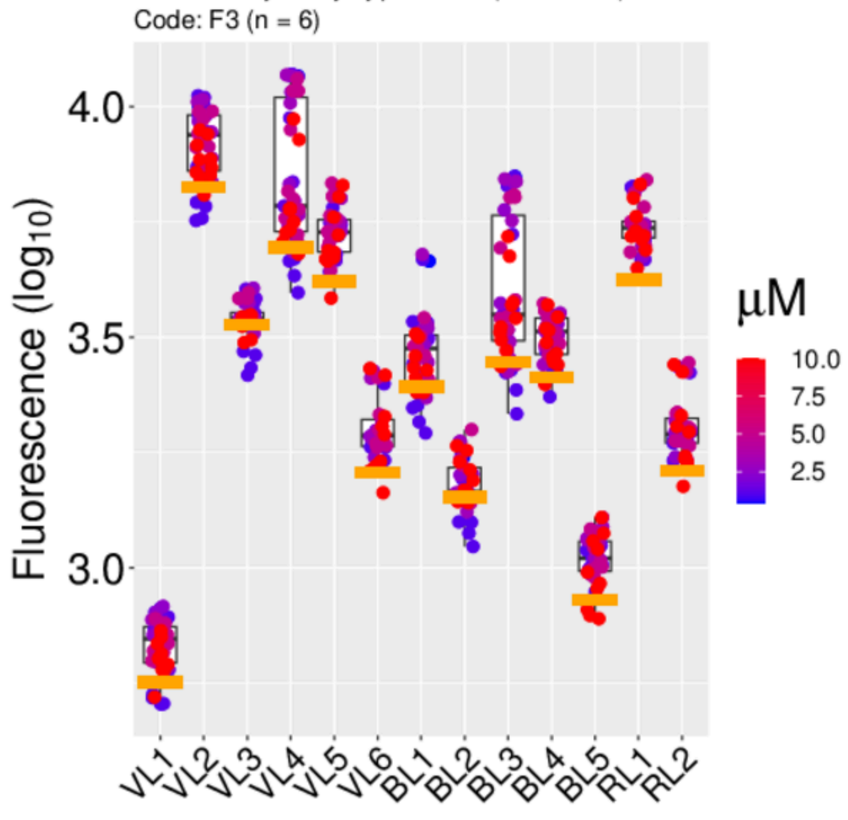
5–Carboxyfluorescein

Code: F192 (n = 8)



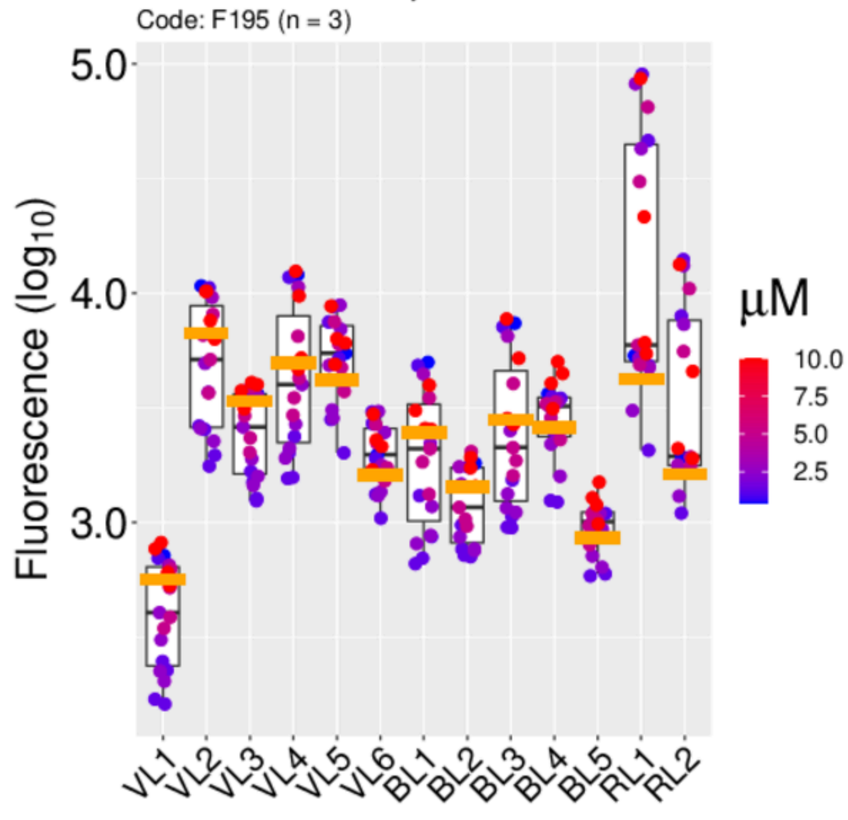
5–hydroxytryptamine (serotonin)

Code: F3 (n = 6)



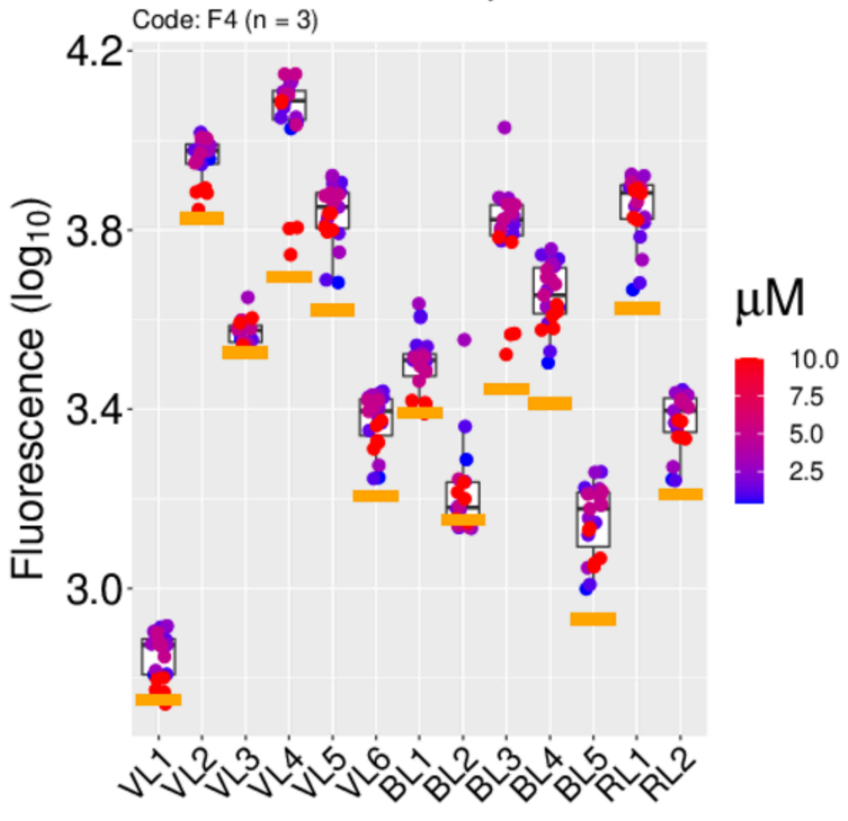
6–Carboxyfluorescein

Code: F195 (n = 3)



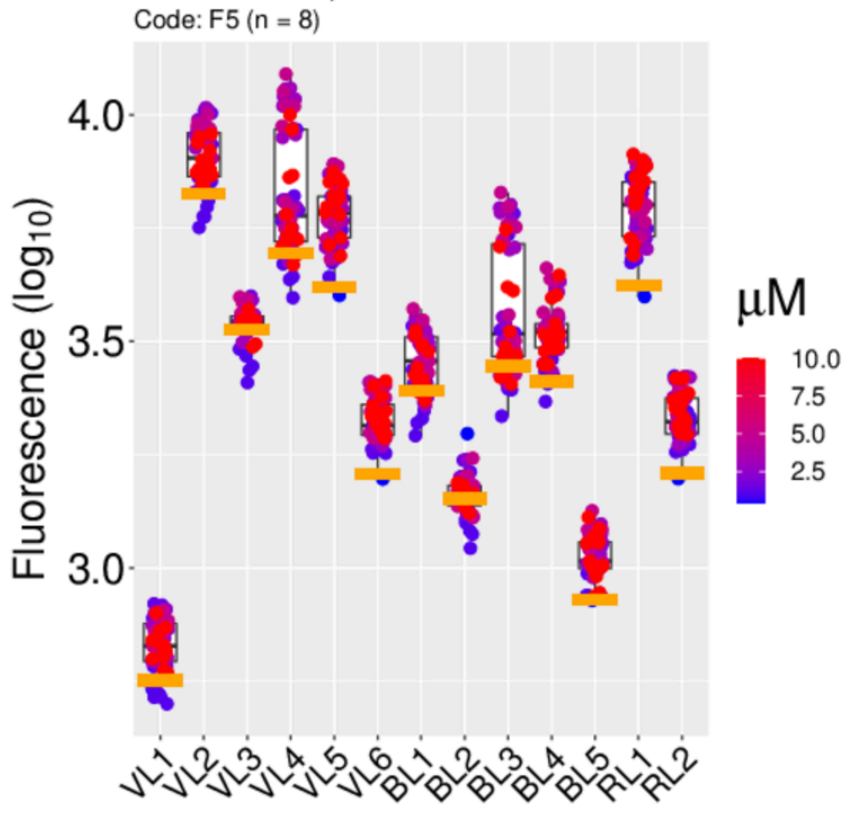
7–Aminoactinomycin D

Code: F4 (n = 3)



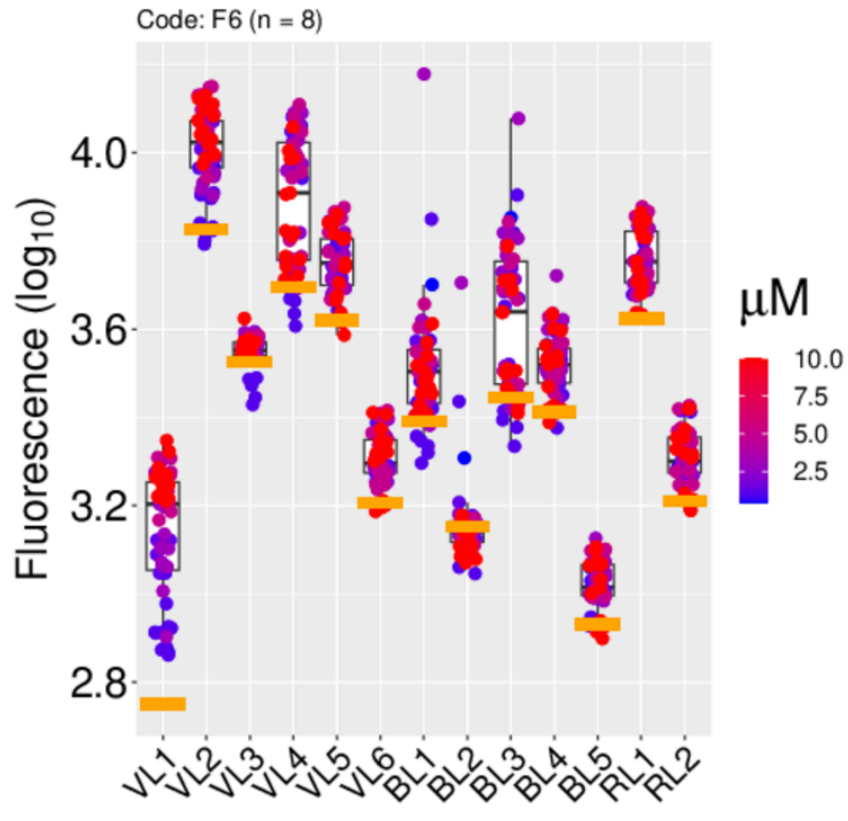
8–Anilinonaphthalene–1–sulfonic acid

Code: F5 (n = 8)

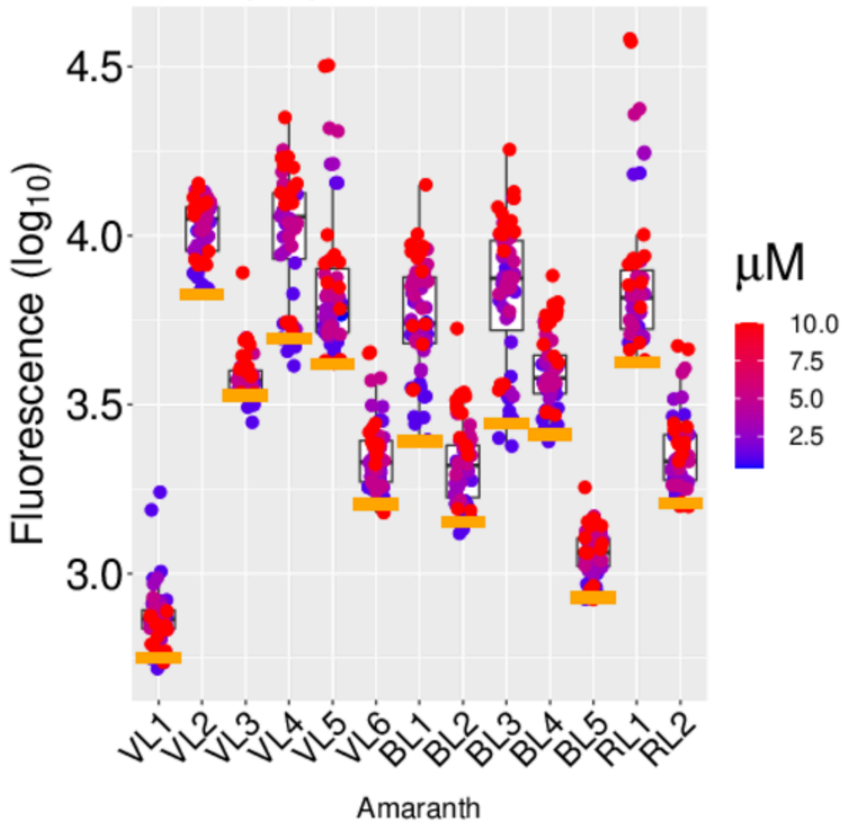


9–aminoacridine

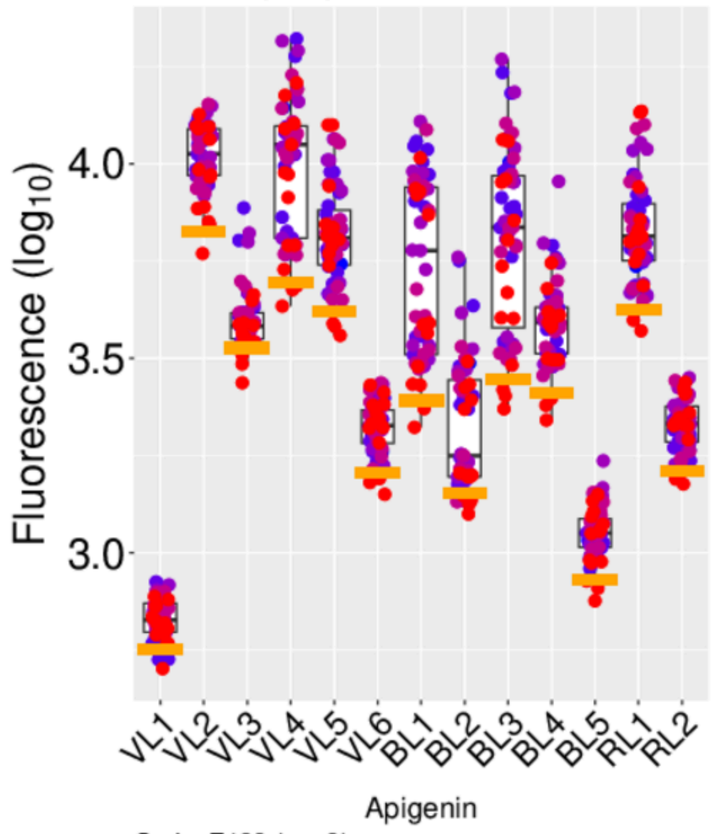
Code: F6 (n = 8)



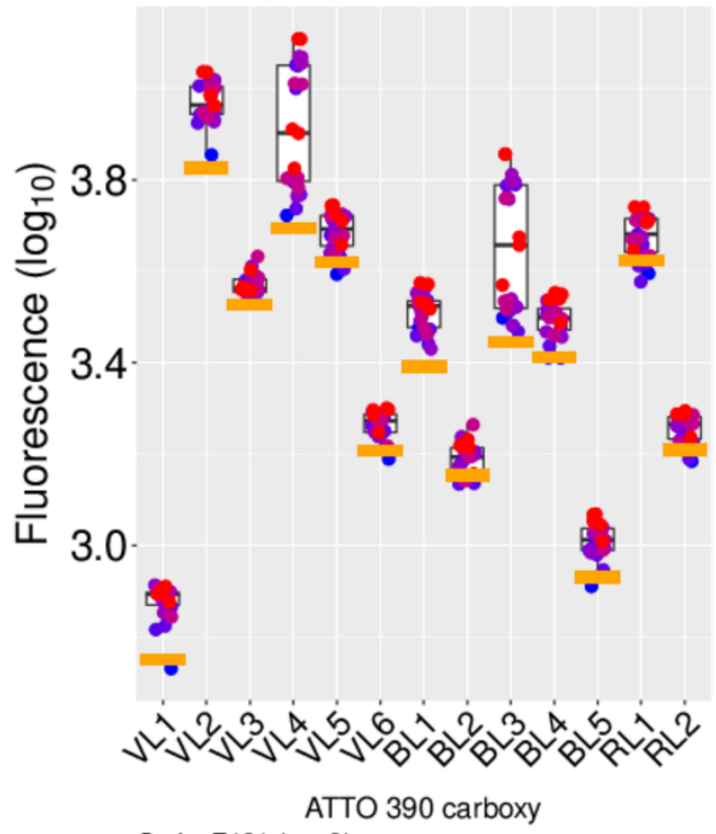
Acridine orange
Code: F7 (n = 8)



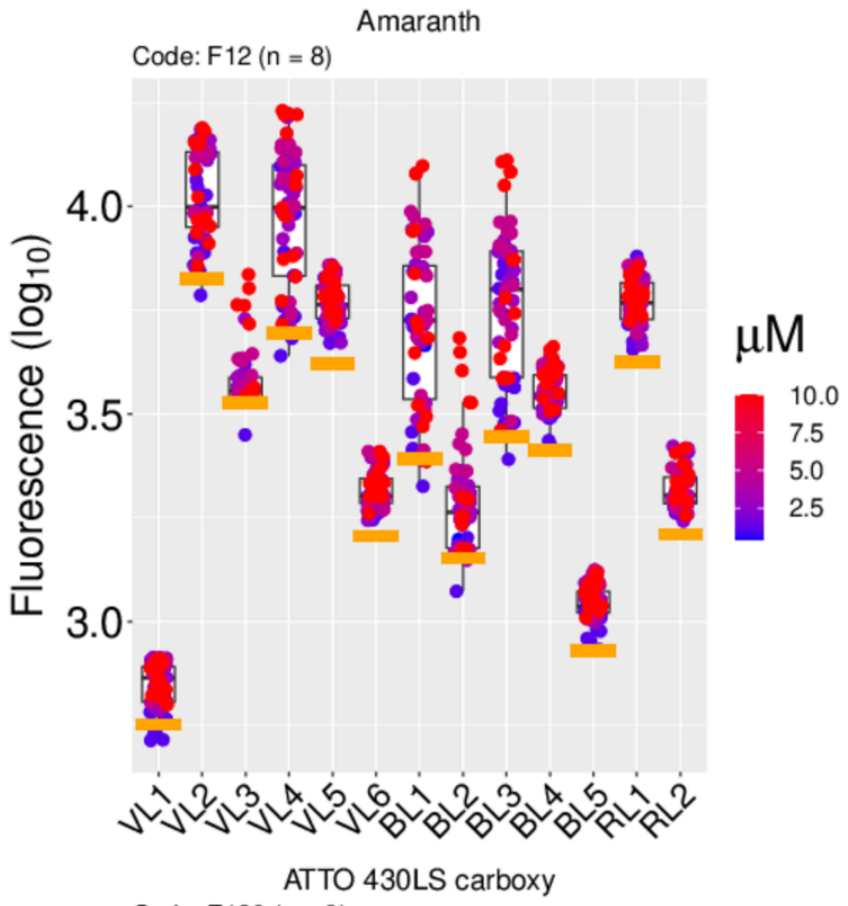
Alizarin
Code: F10 (n = 8)



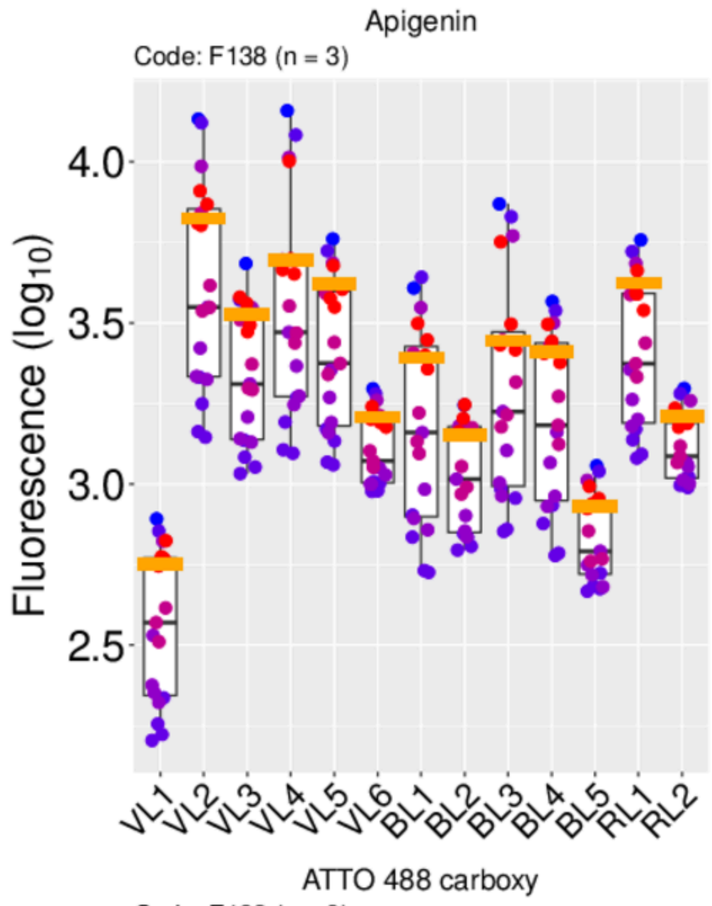
Allura Red
Code: F11 (n = 3)



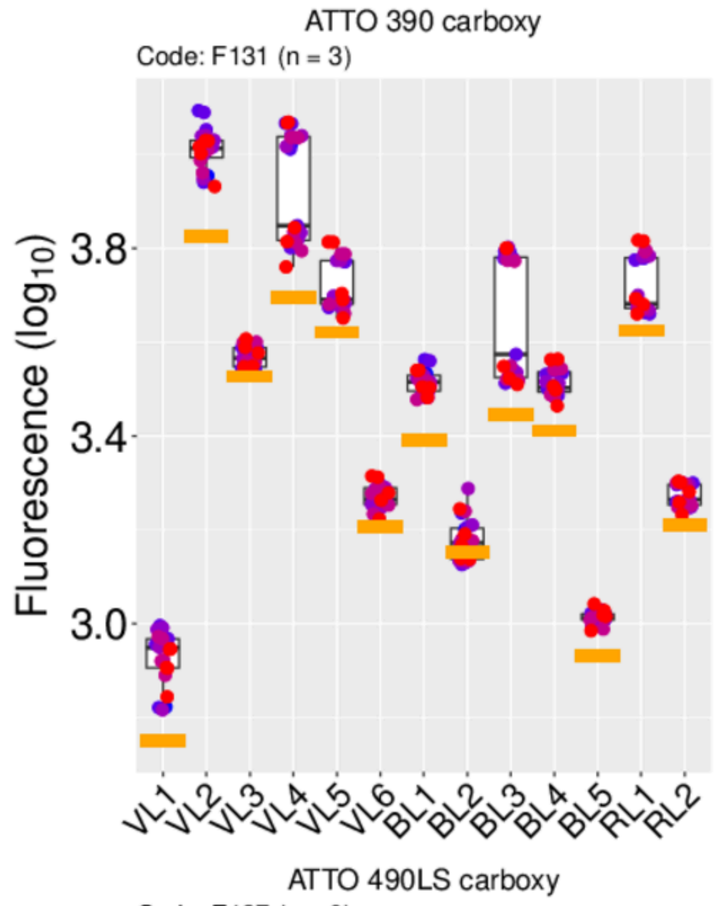
Amaranth
Code: F12 (n = 8)



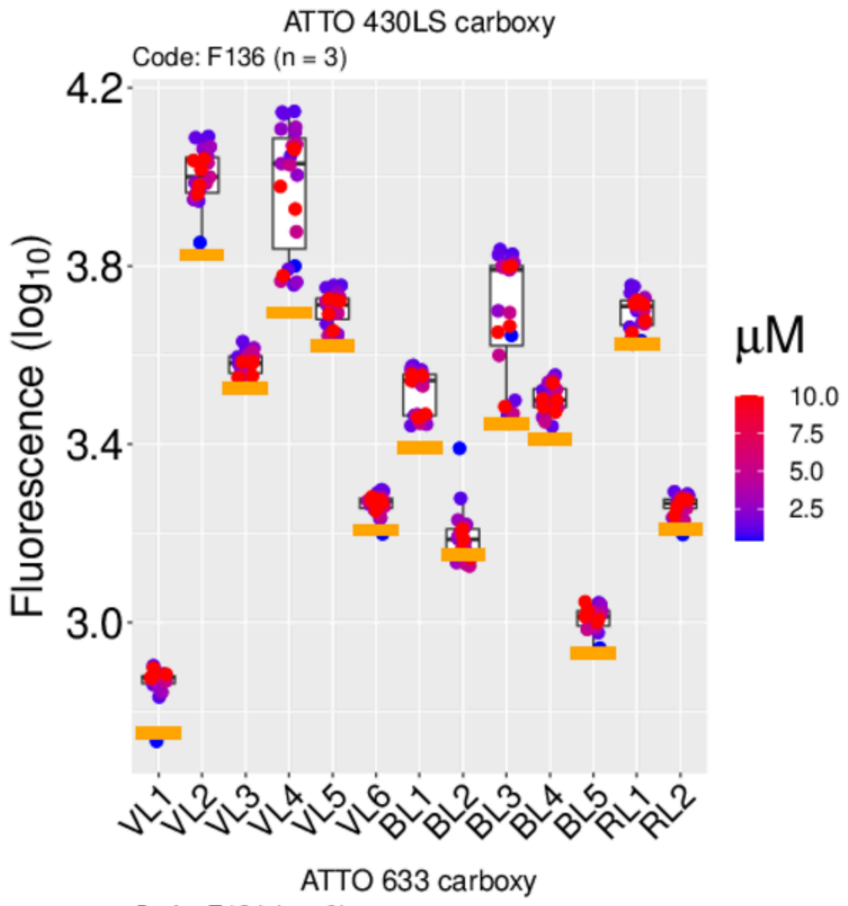
Apigenin
Code: F138 (n = 3)



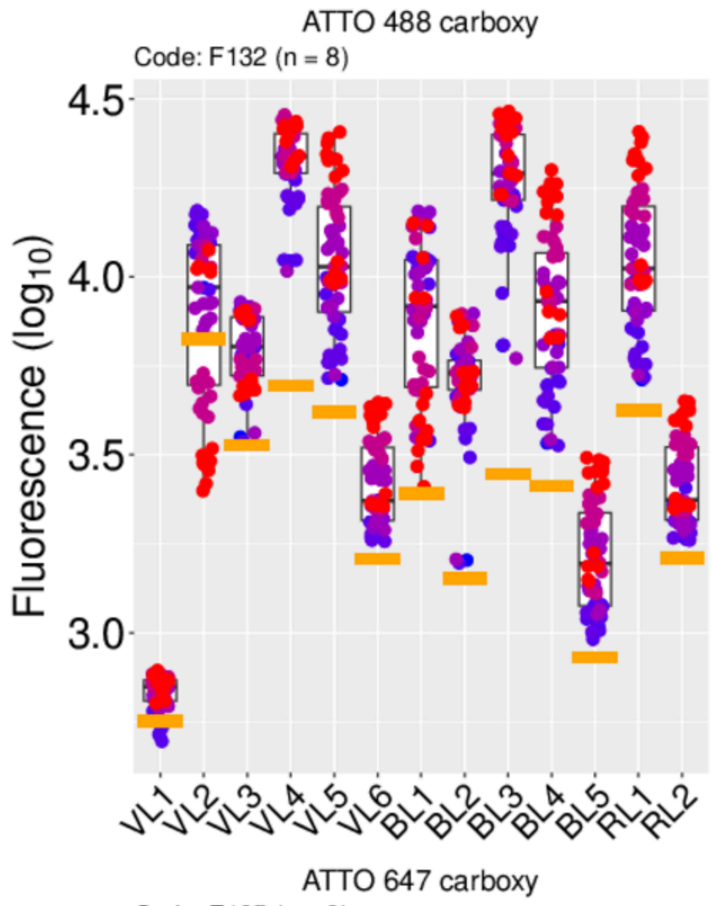
ATTO 390 carboxy
Code: F131 (n = 3)



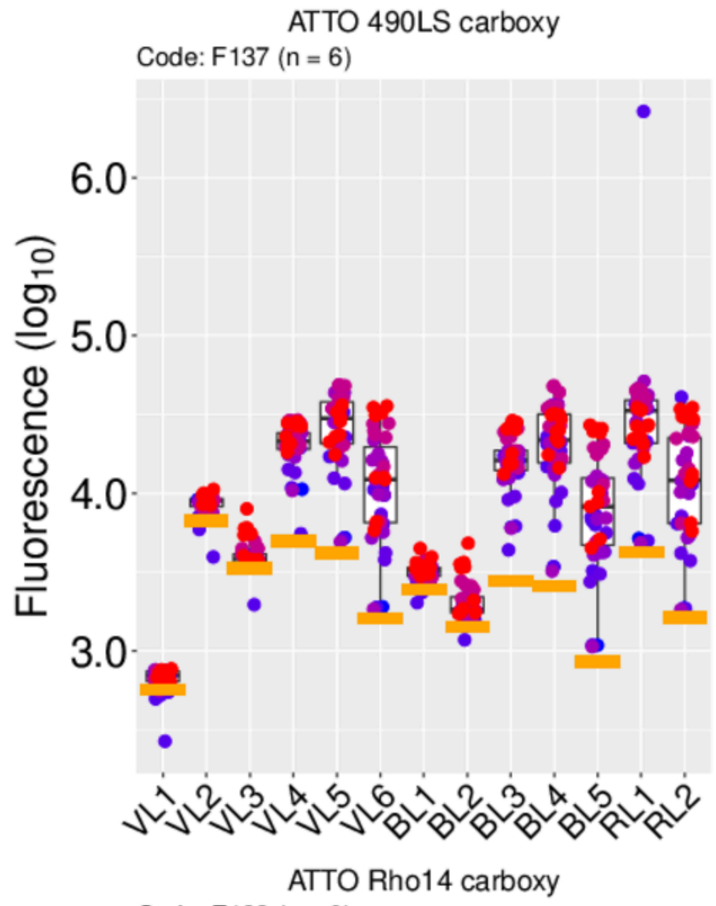
ATTO 430LS carboxy
Code: F136 (n = 3)



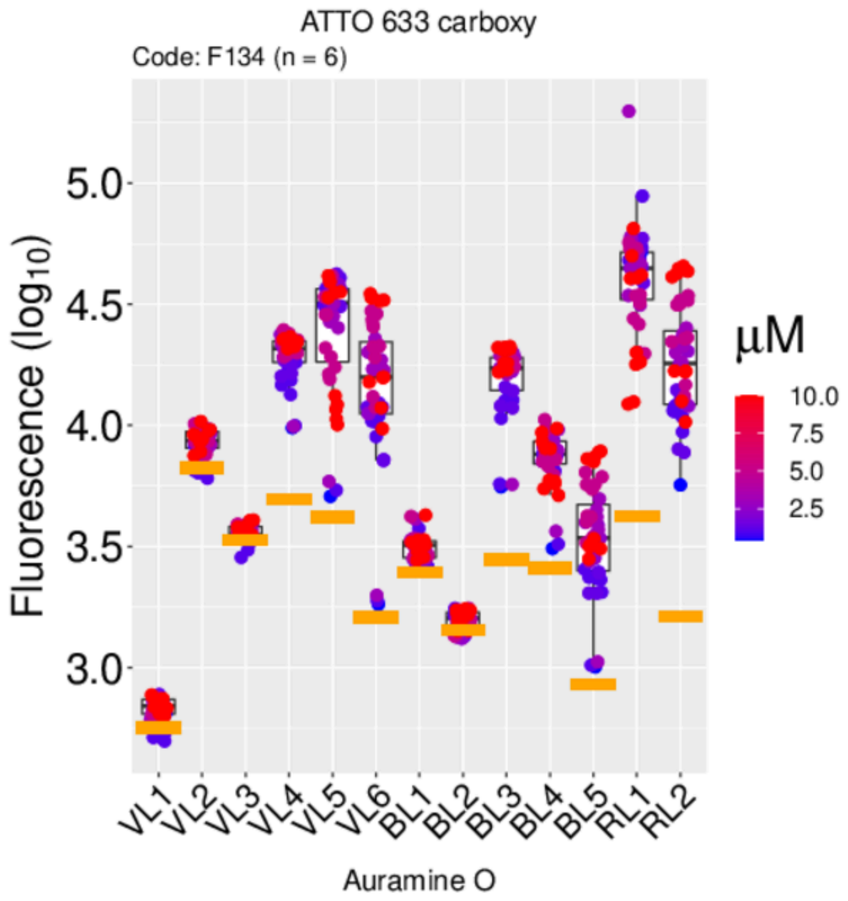
ATTO 488 carboxy
Code: F132 (n = 8)



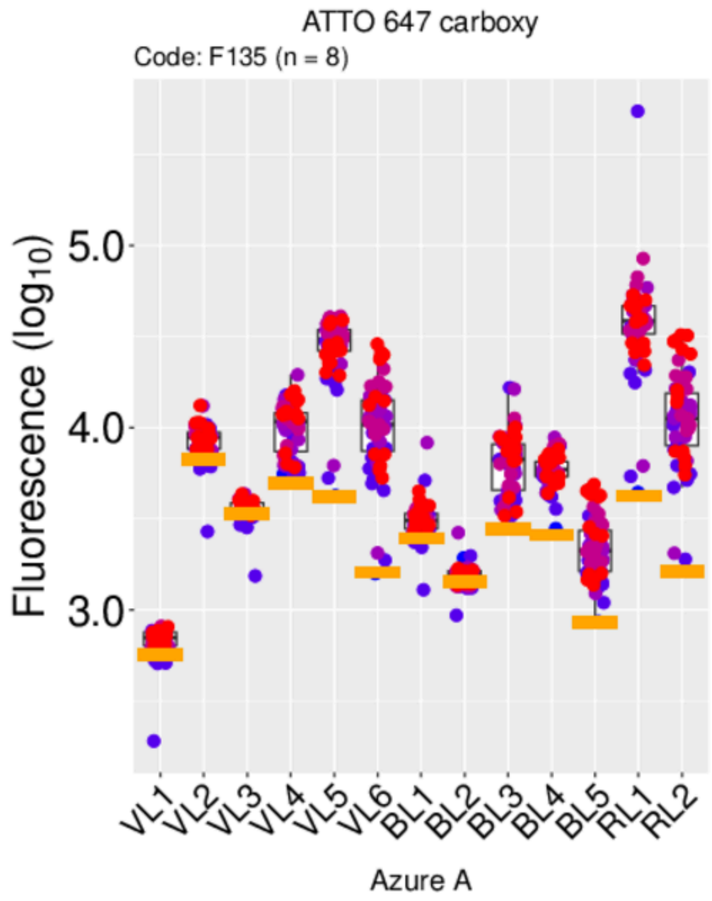
ATTO 490LS carboxy
Code: F137 (n = 6)



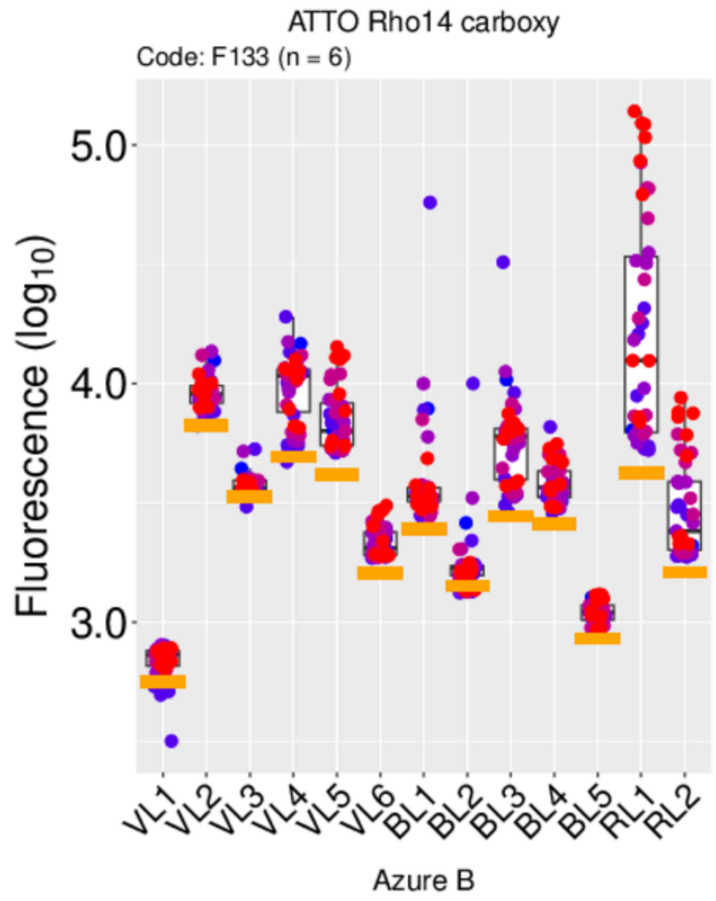
ATTO 633 carboxy
Code: F134 (n = 6)



ATTO 647 carboxy
Code: F135 (n = 8)



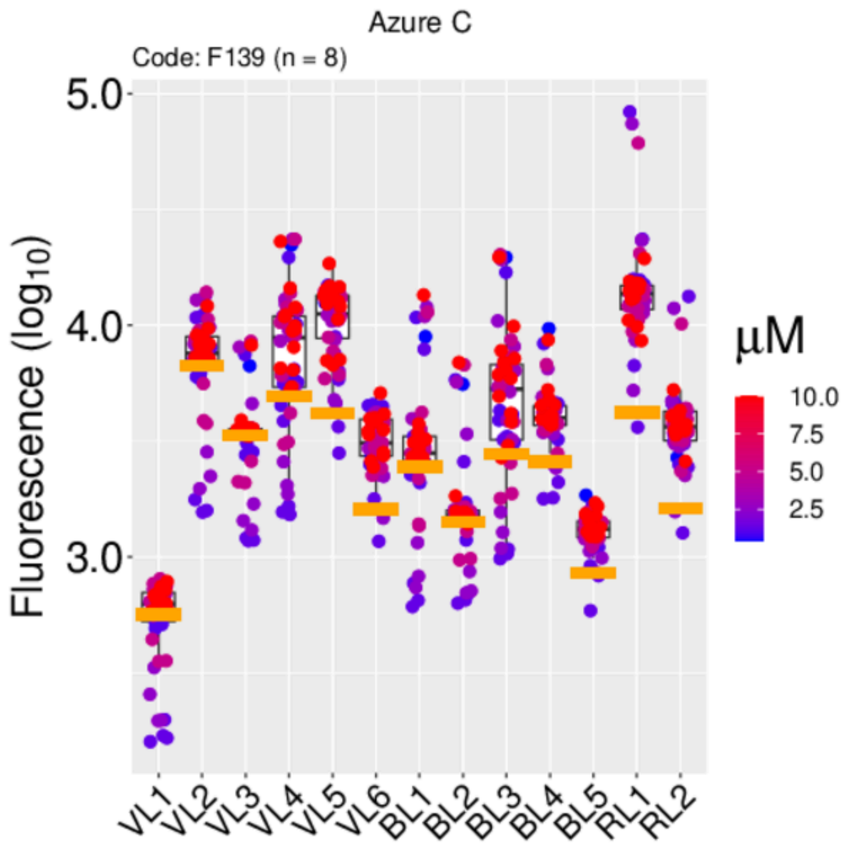
ATTO Rho14 carboxy
Code: F133 (n = 6)

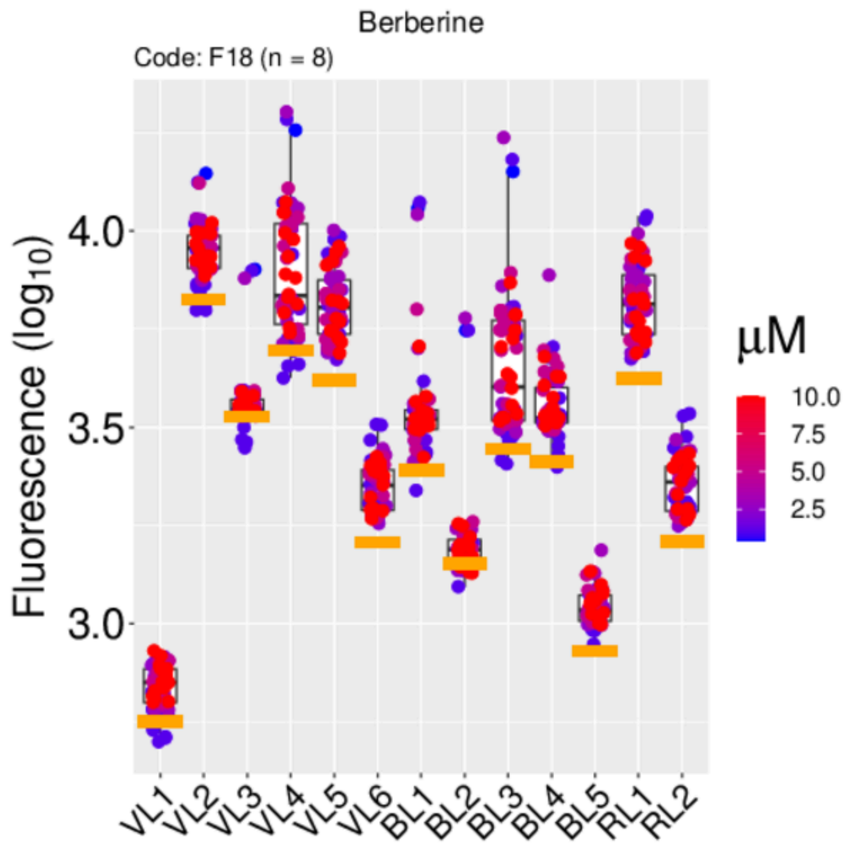


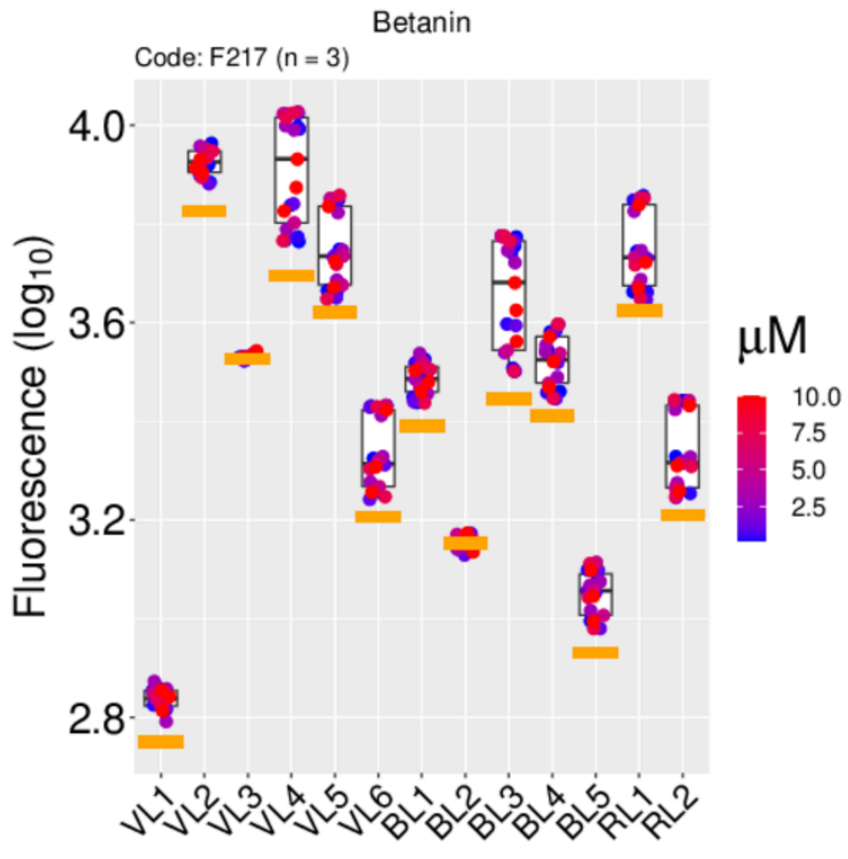
Auramine O
Code: F201 (n = 3)

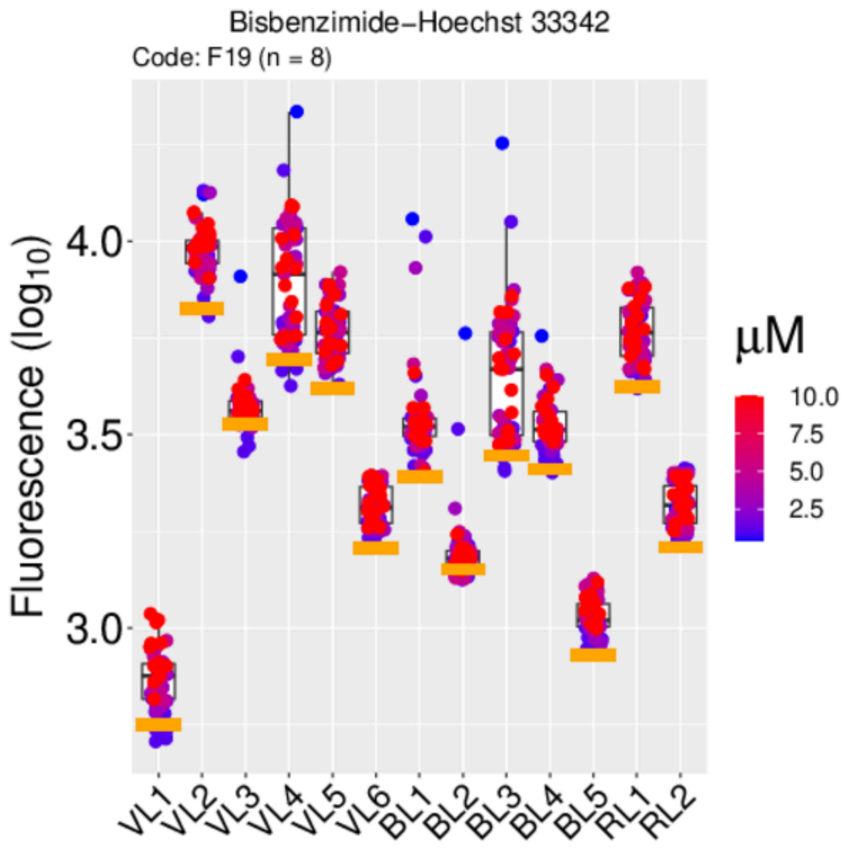
Azure A
Code: F15 (n = 8)

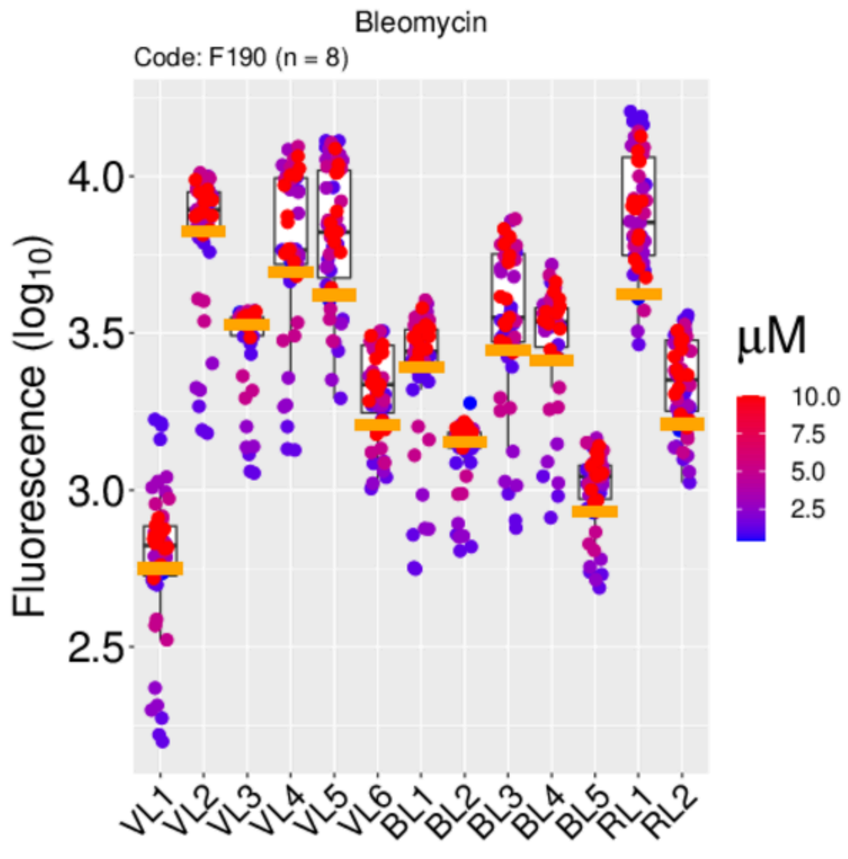
Azure B
Code: F16 (n = 8)

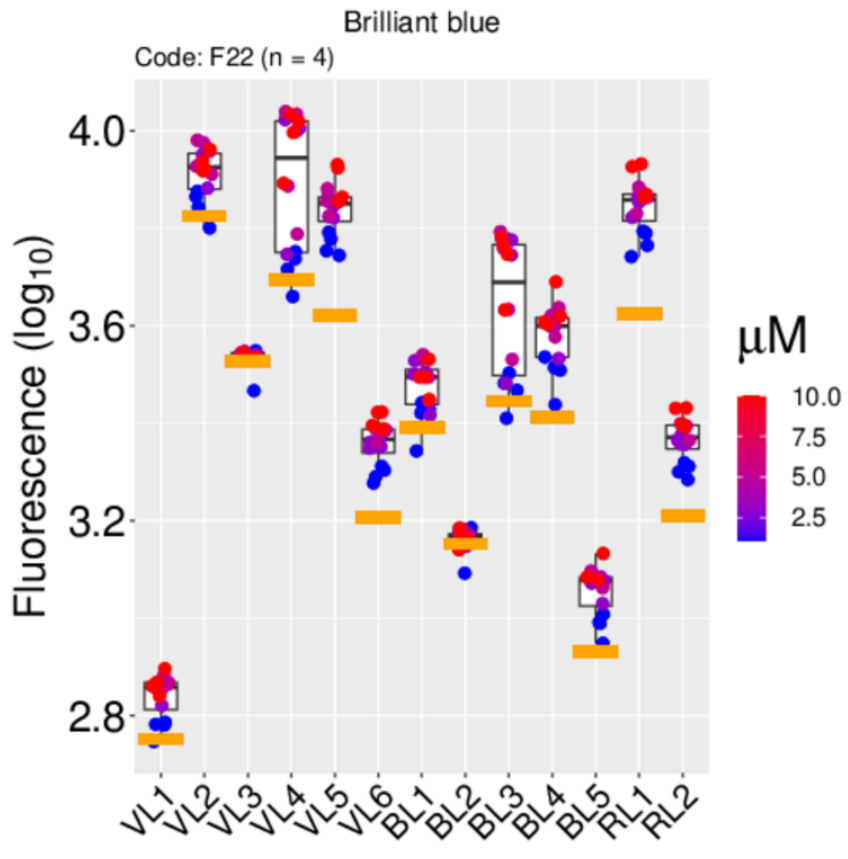

Azure C
Code: F139 (n = 8)
Fluorescence (log10)
5.0
4.0
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

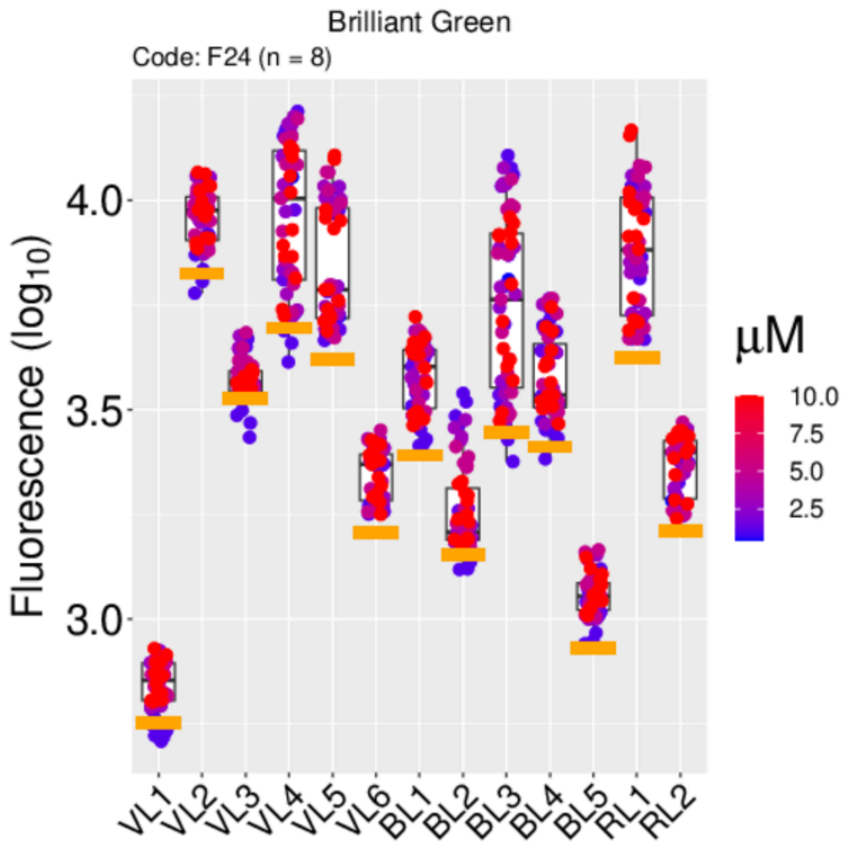

Berberine
Code: F18 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

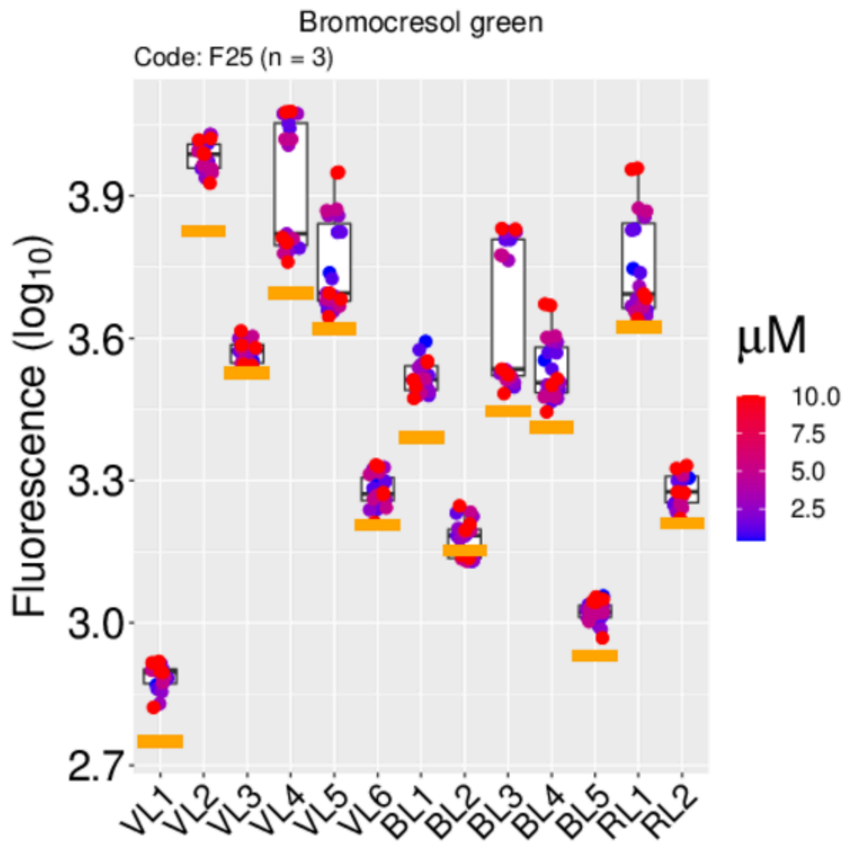

Betanin
Code: F217 (n = 3)
Fluorescence (log10)
4.0
3.6
3.2
2.8
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

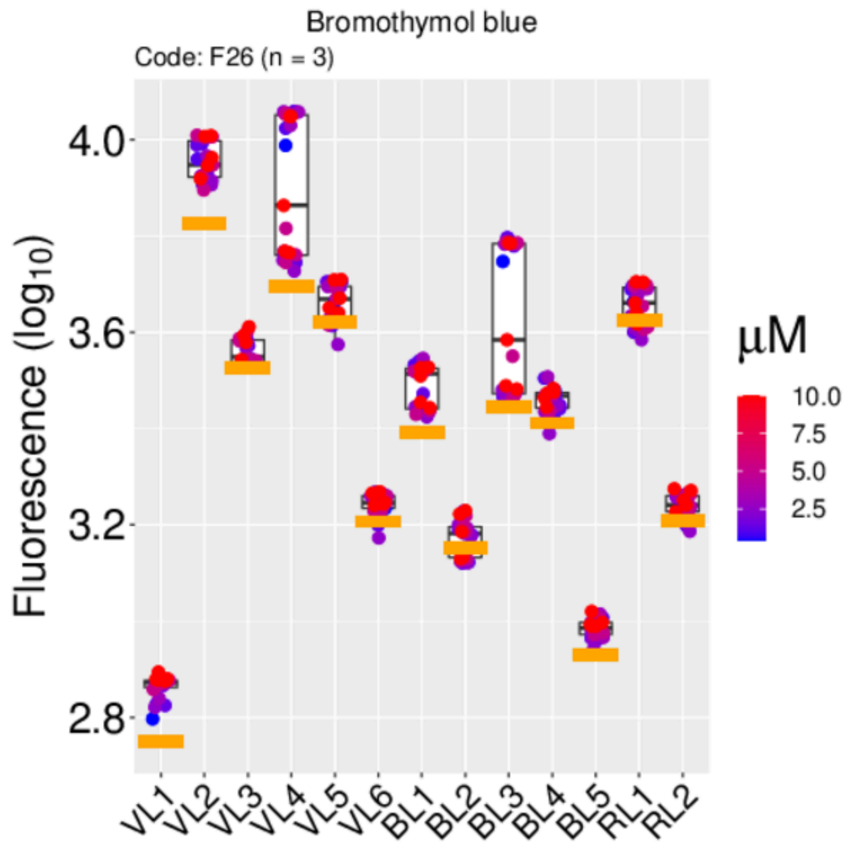

Bisbenzimide−Hoechst 33342
Code: F19 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

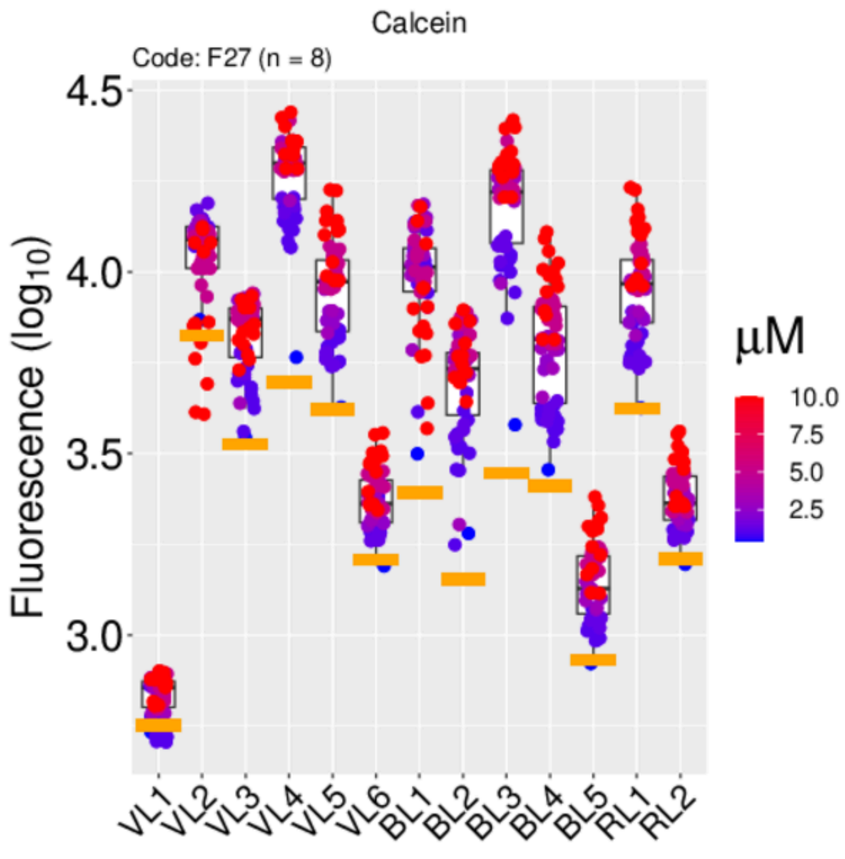

Bleomycin
Code: F190 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
2.5
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

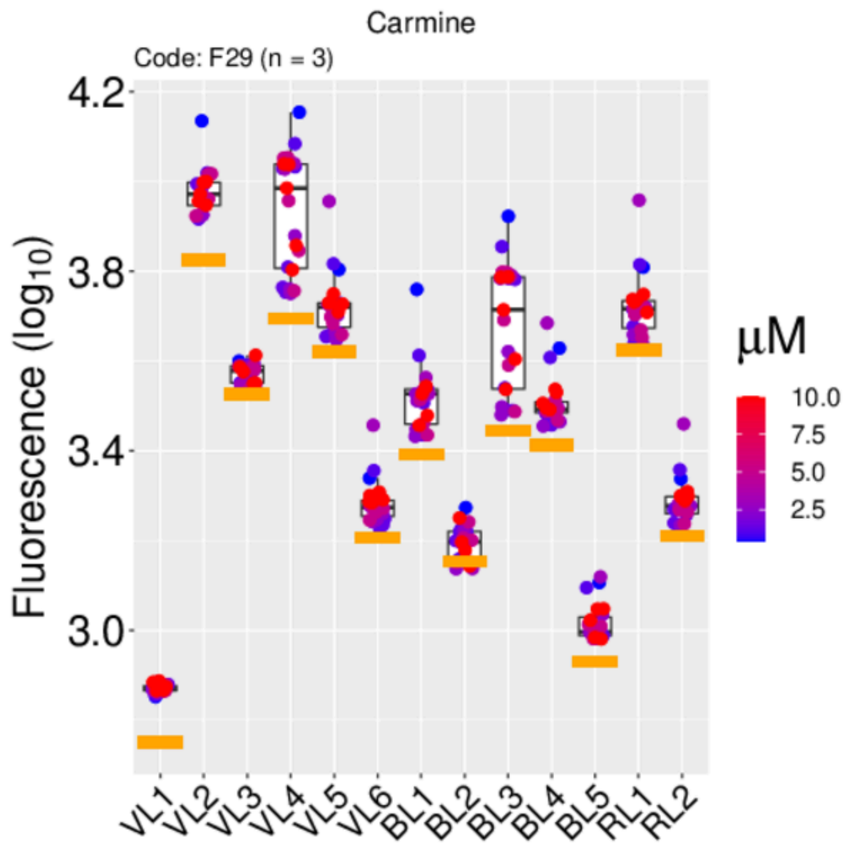

Brilliant blue
Code: F22 (n = 4)
Fluorescence (log10)
4.0
3.6
3.2
2.8
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

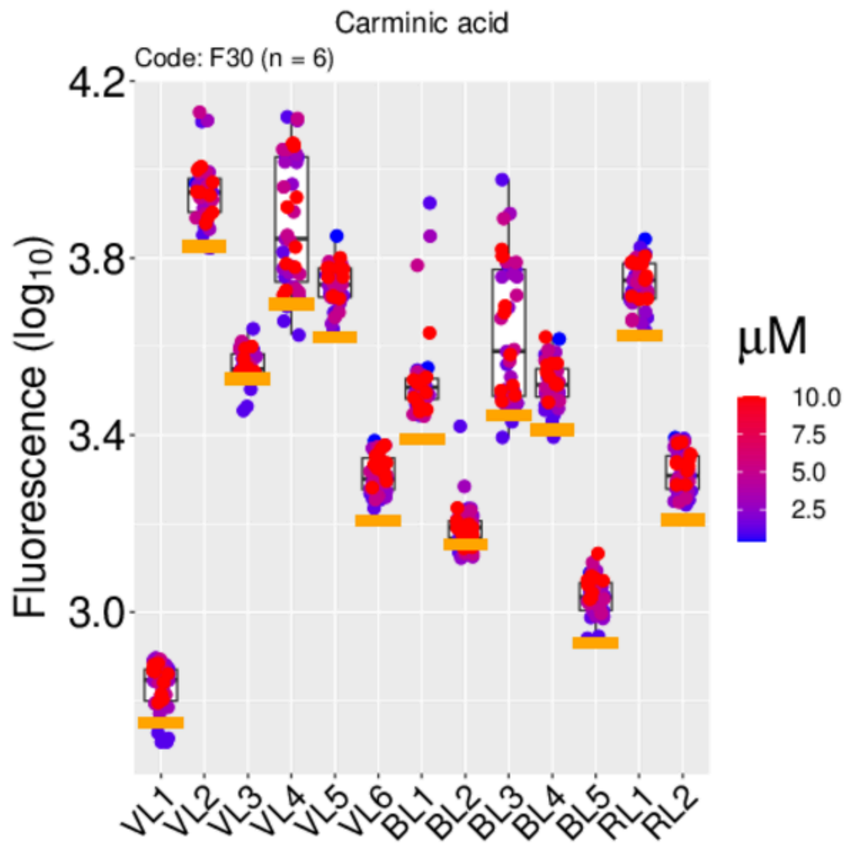

Brilliant Green
Code: F24 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

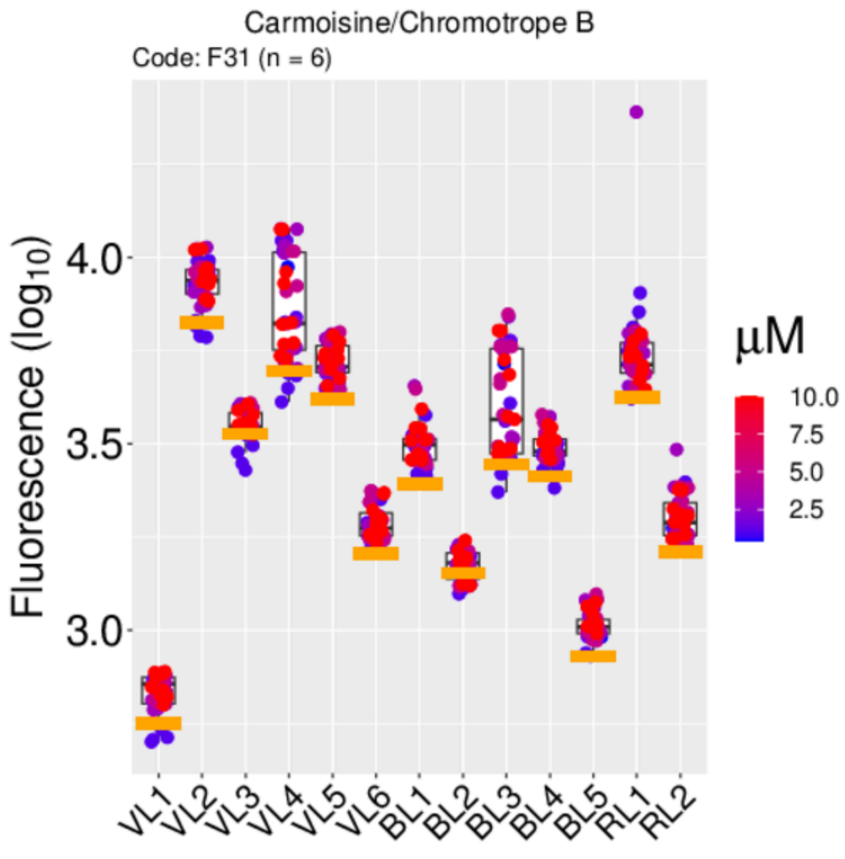

Bromocresol green
Code: F25 (n = 3)
Fluorescence (log10)
3.9
3.6
3.3
3.0
2.7
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

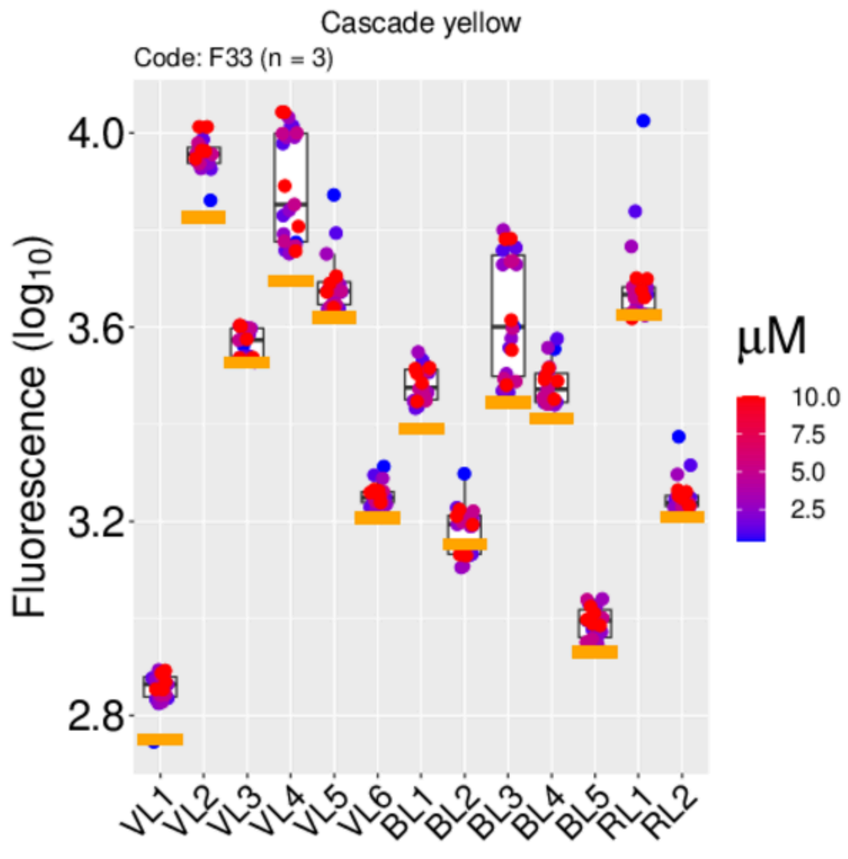

Bromothymol blue
Code: F26 (n = 3)
Fluorescence (log10)
4.0
3.6
3.2
2.8
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

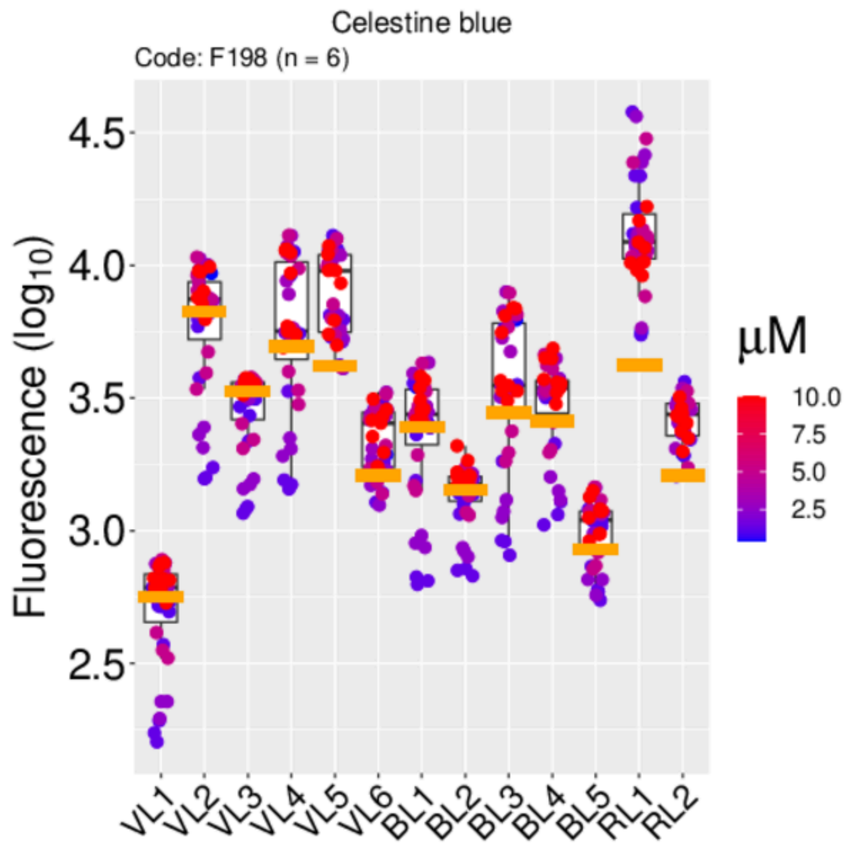

Calcein
Code: F27 (n = 8)
Fluorescence (log10)
4.5
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Carmine
Code: F29 (n = 3)
Fluorescence (log10)
4.2
3.8
3.4
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

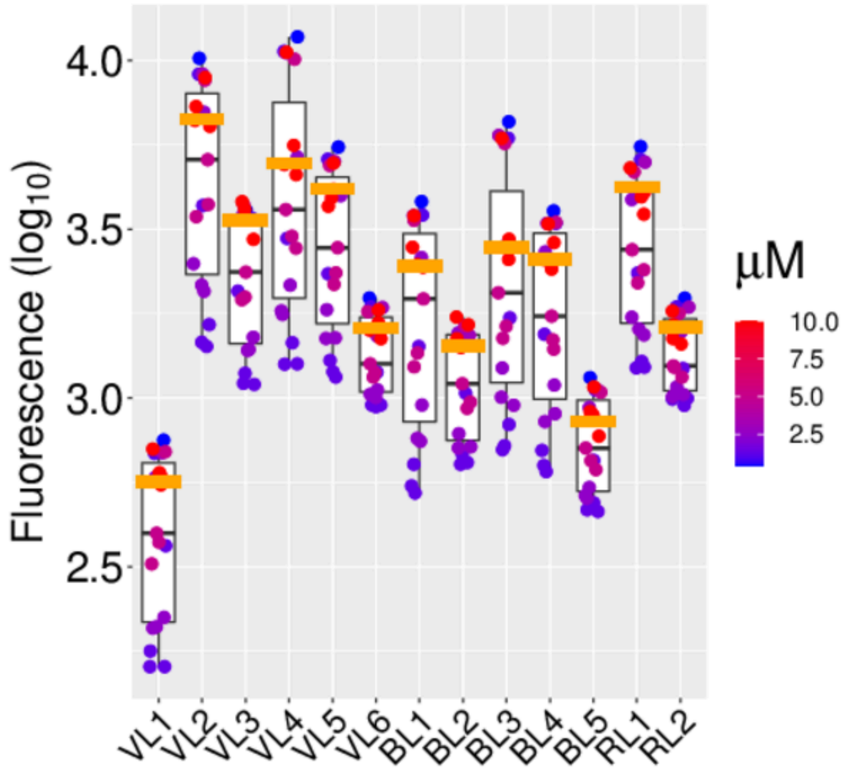

Carminic acid
Code: F30 (n = 6)
Fluorescence (log10)
4.2
3.8
3.4
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Carmoisine/Chromotrope B
Code: F31 (n = 6)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

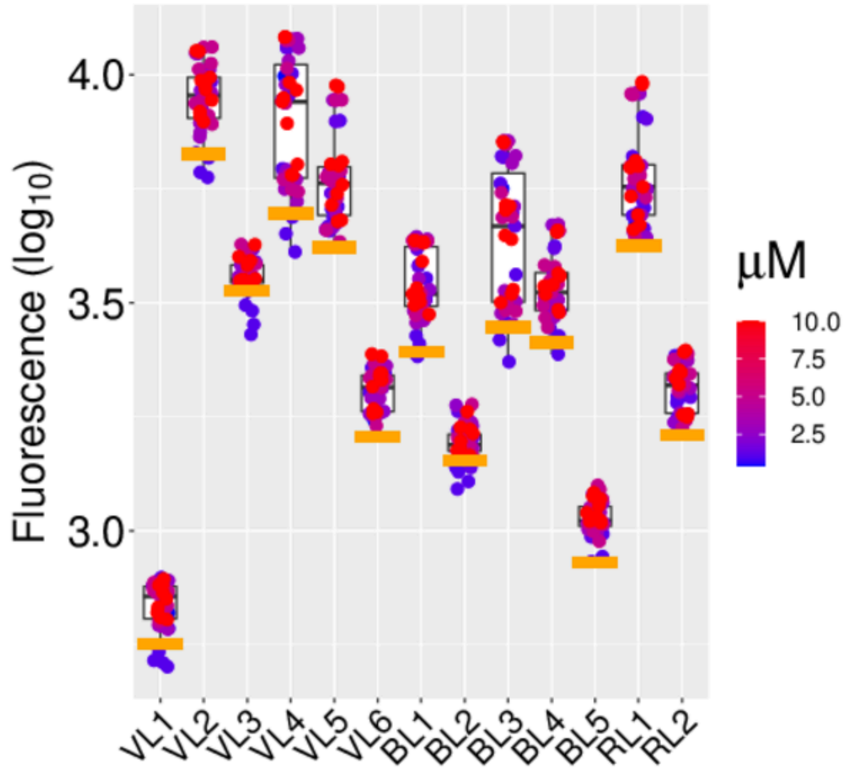

Cascade yellow
Code: F33 (n = 3)
Fluorescence (log10)
4.0
3.6
3.2
2.8
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Celestine blue
Code: F198 (n = 6)
Fluorescence (log10)
4.5
4.0
3.5
3.0
2.5
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

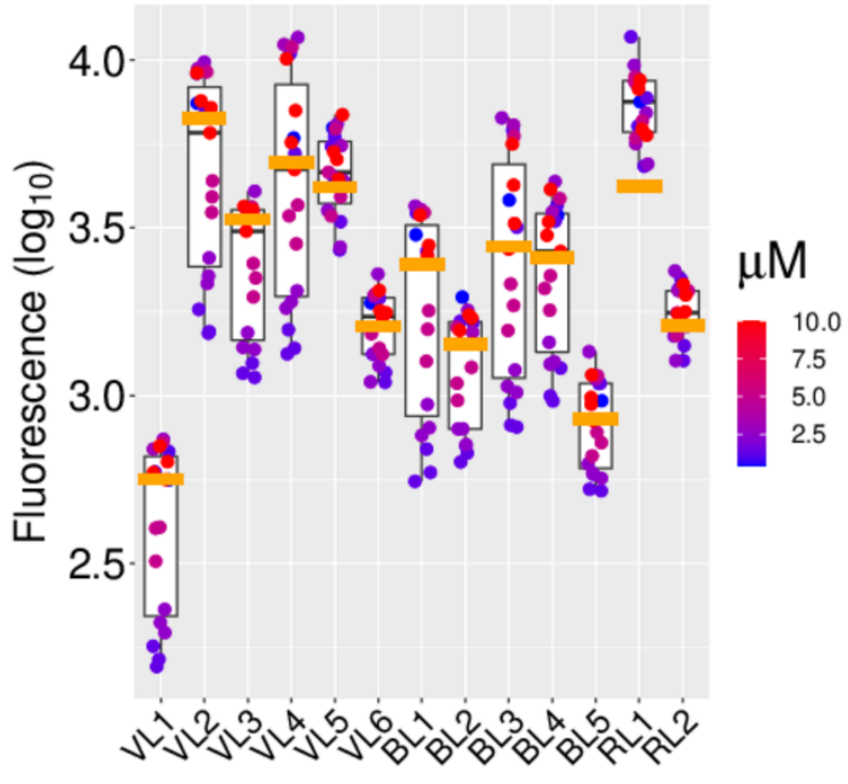
Cell Mask Deep Red
Code: F34 (n = 3)



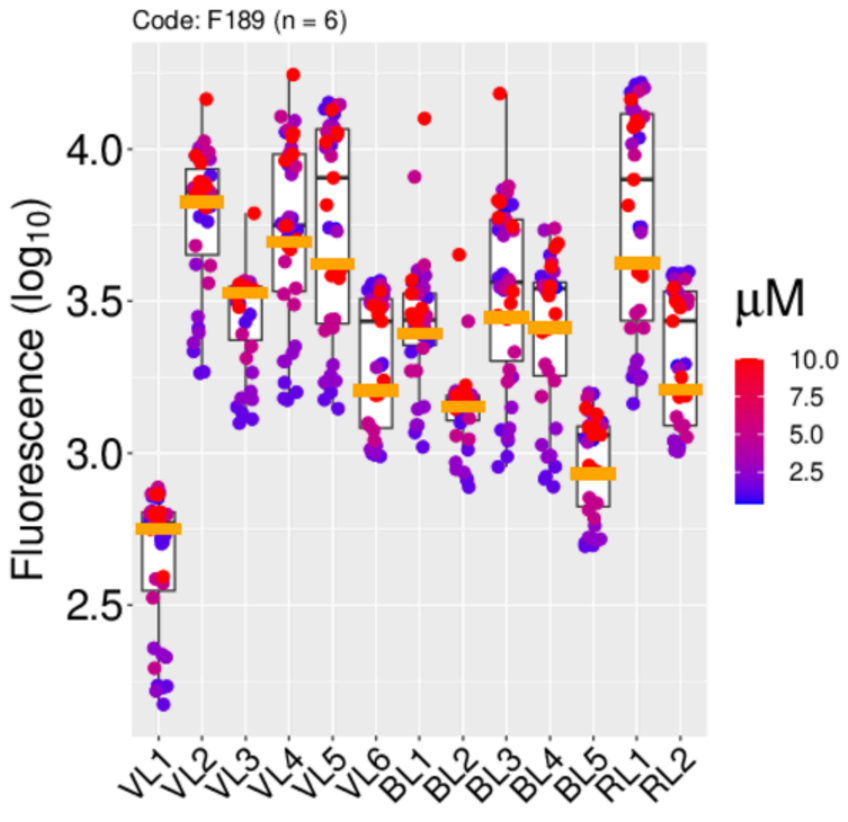
Chelerythrine
Code: F35 (n = 6)



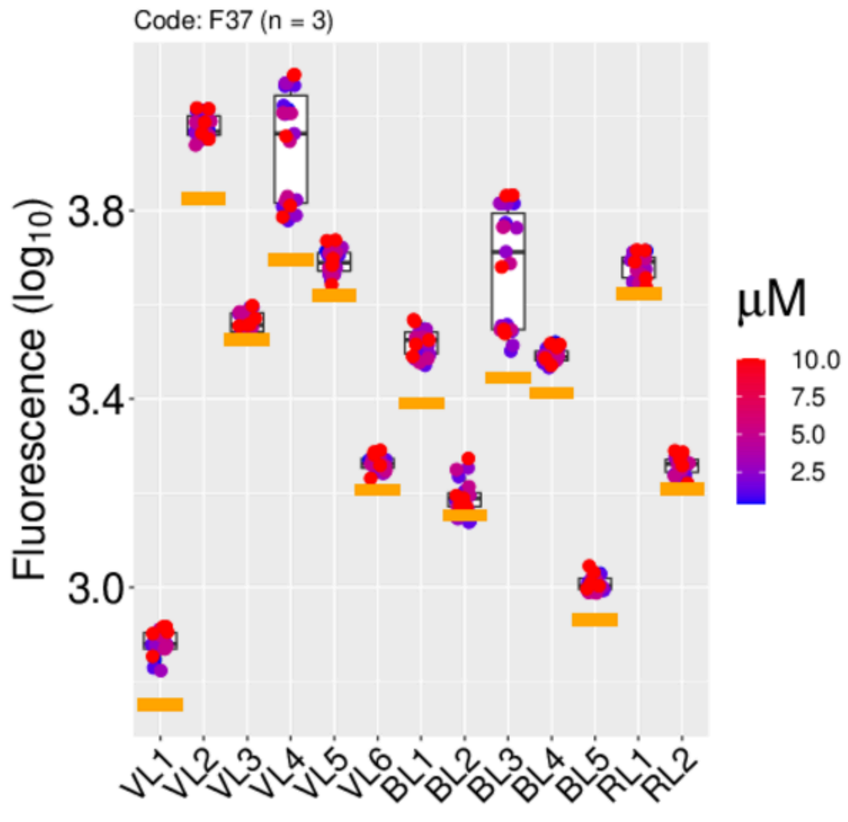
Chlorophenol red
Code: F142 (n = 3)



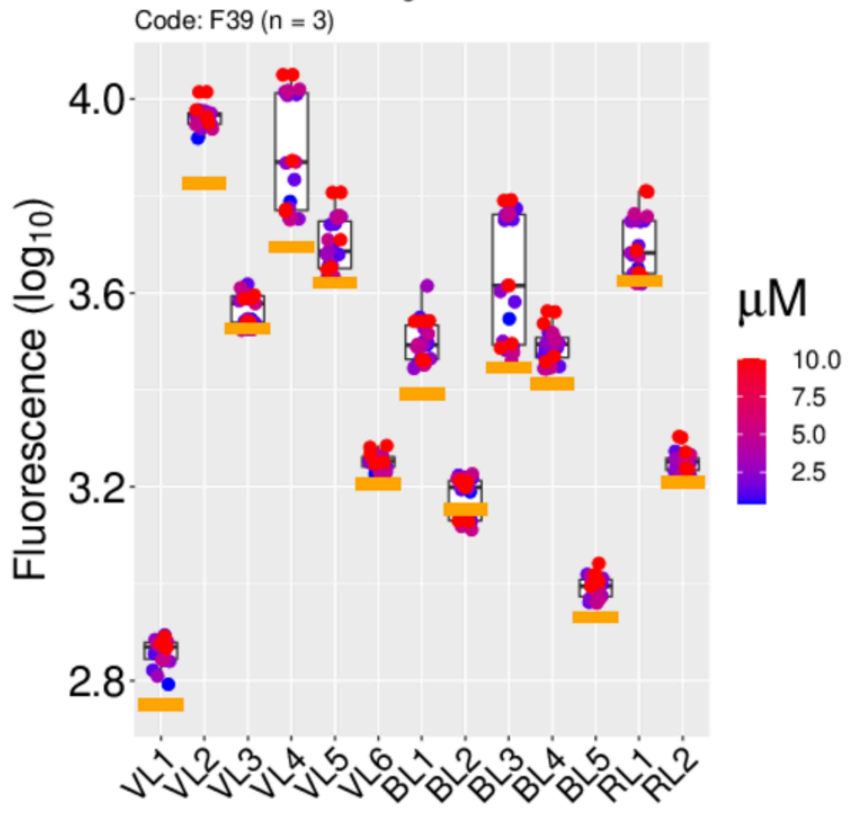
Clofazimine
Code: F189 (n = 6)



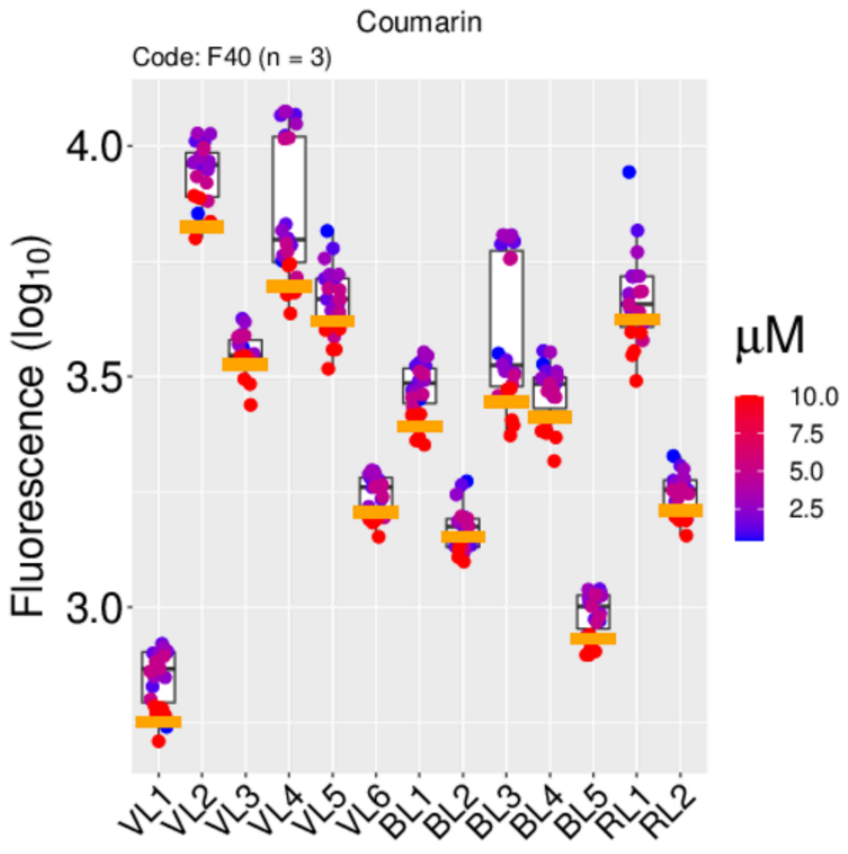
Coelenterazine
Code: F37 (n = 3)



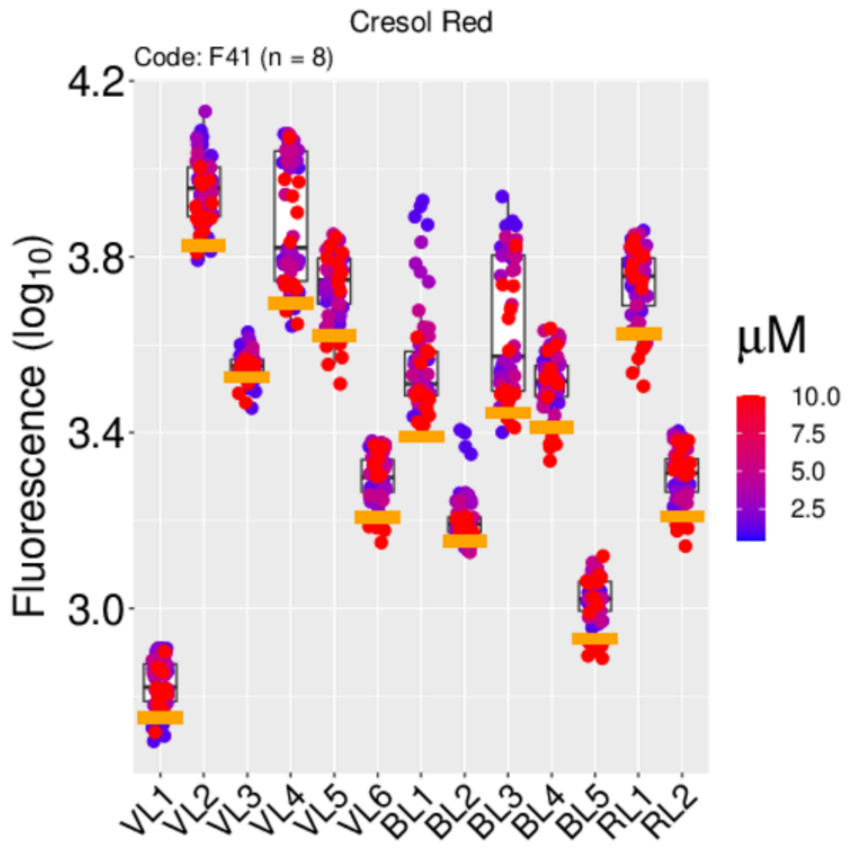
Congo Red
Code: F39 (n = 3)



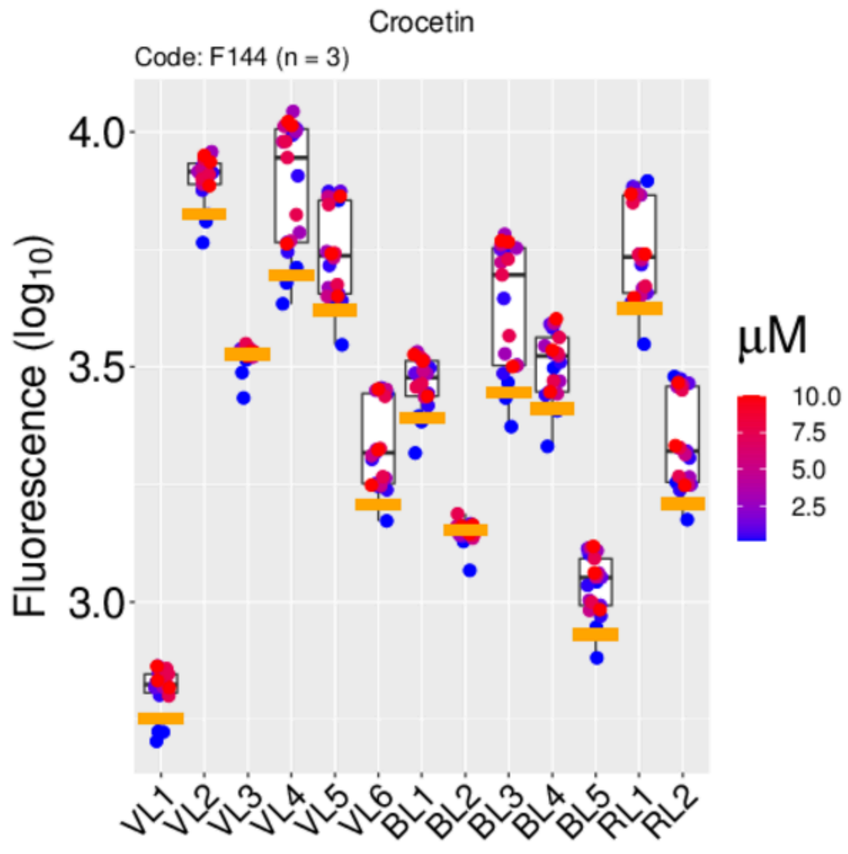
Coumarin
Code: F40 (n = 3)



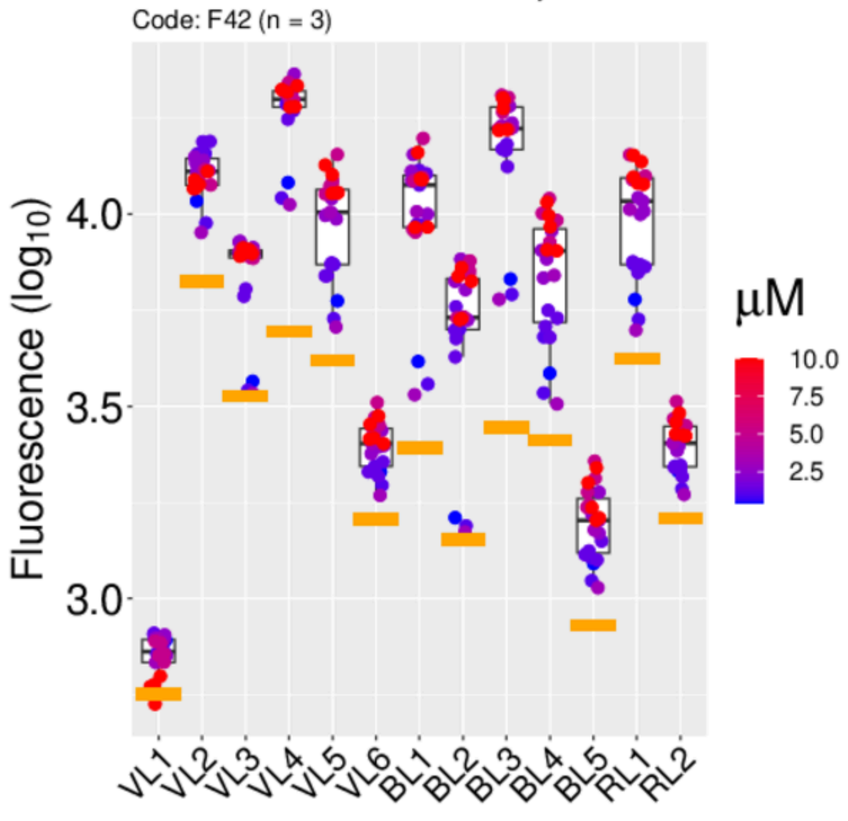
Cresol Red
Code: F41 (n = 8)



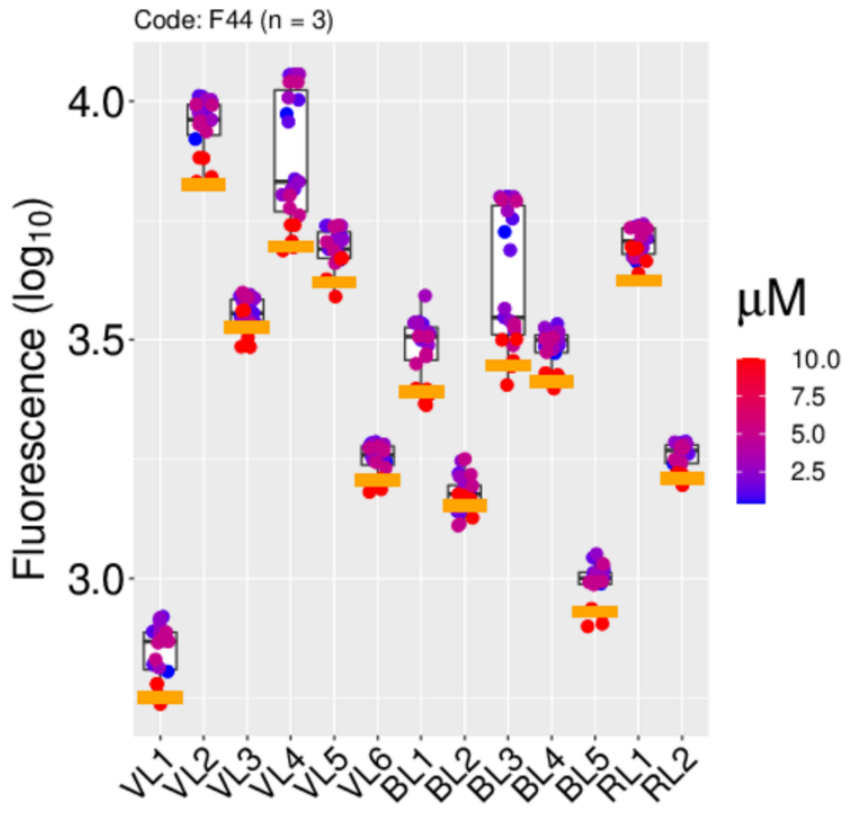
Crocetin
Code: F144 (n = 3)



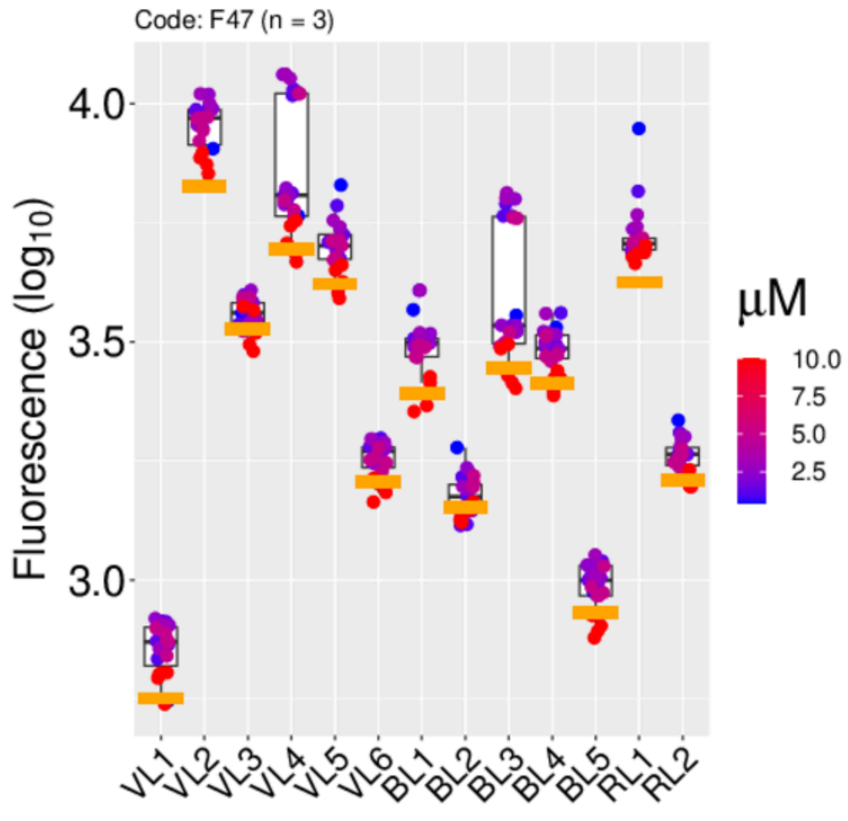
CruzFluor 405 succinimidyl ester
Code: F42 (n = 3)



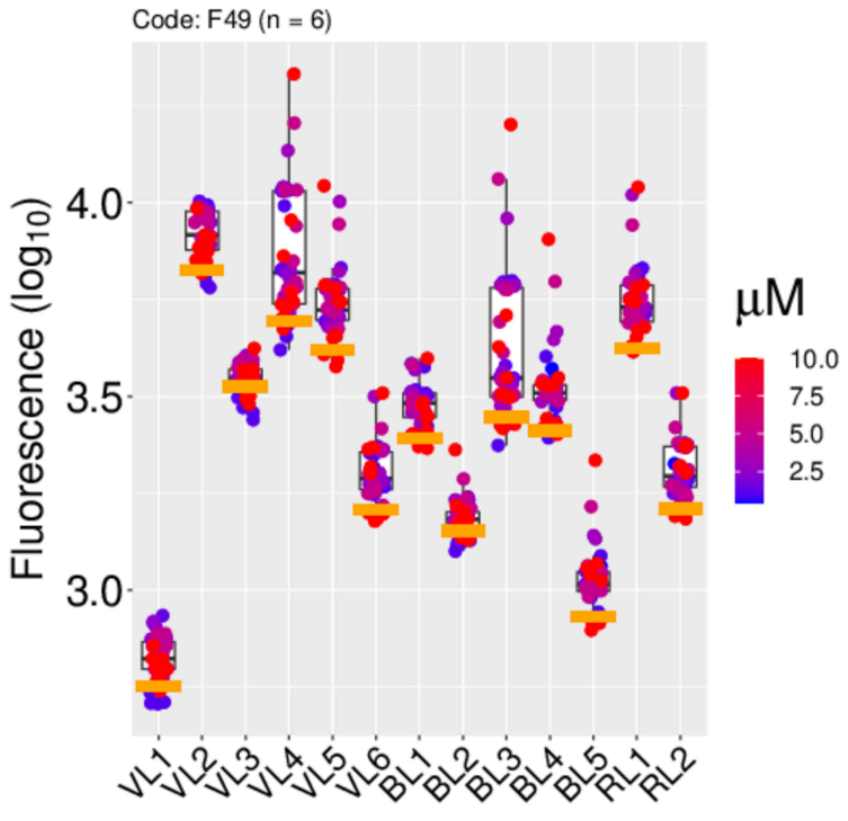
Curcumin
Code: F44 (n = 3)



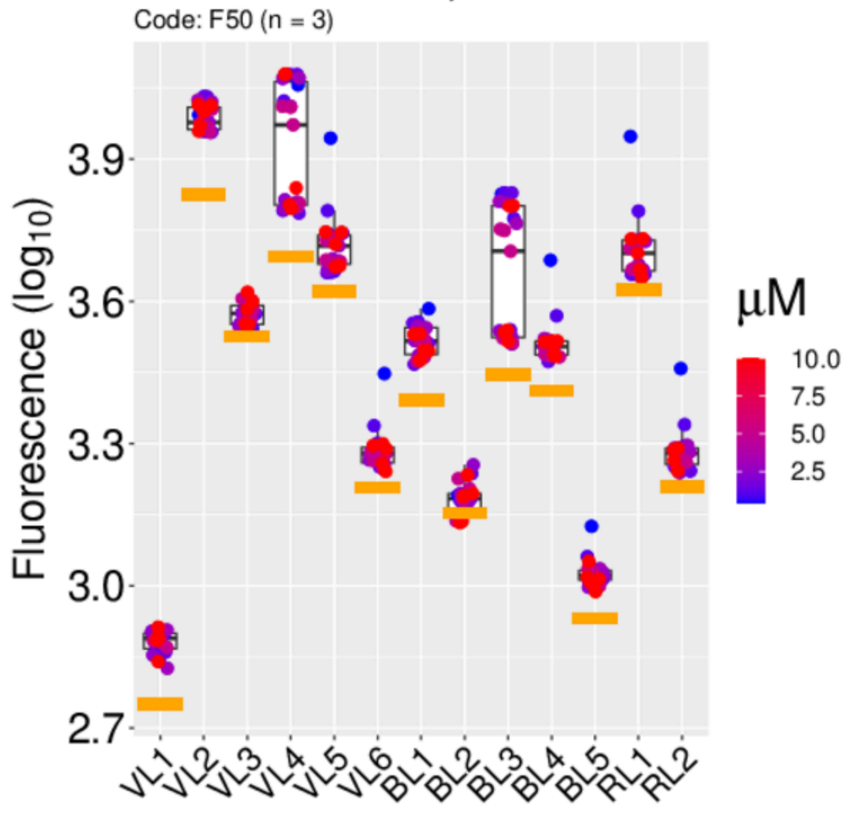
DAPI
Code: F47 (n = 3)



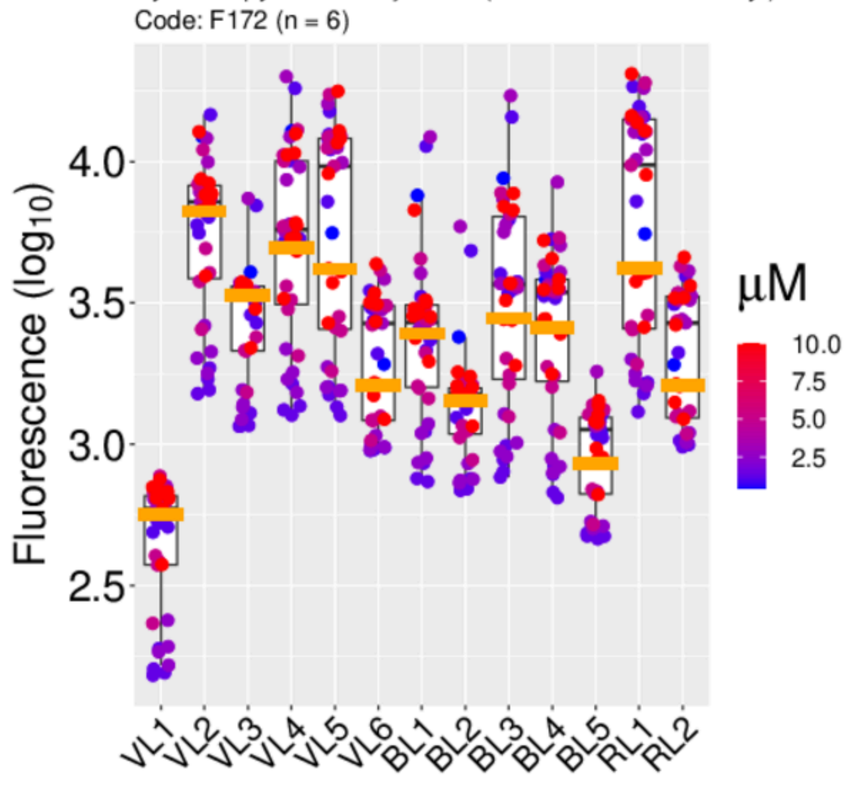
Darrow red
Code: F49 (n = 6)

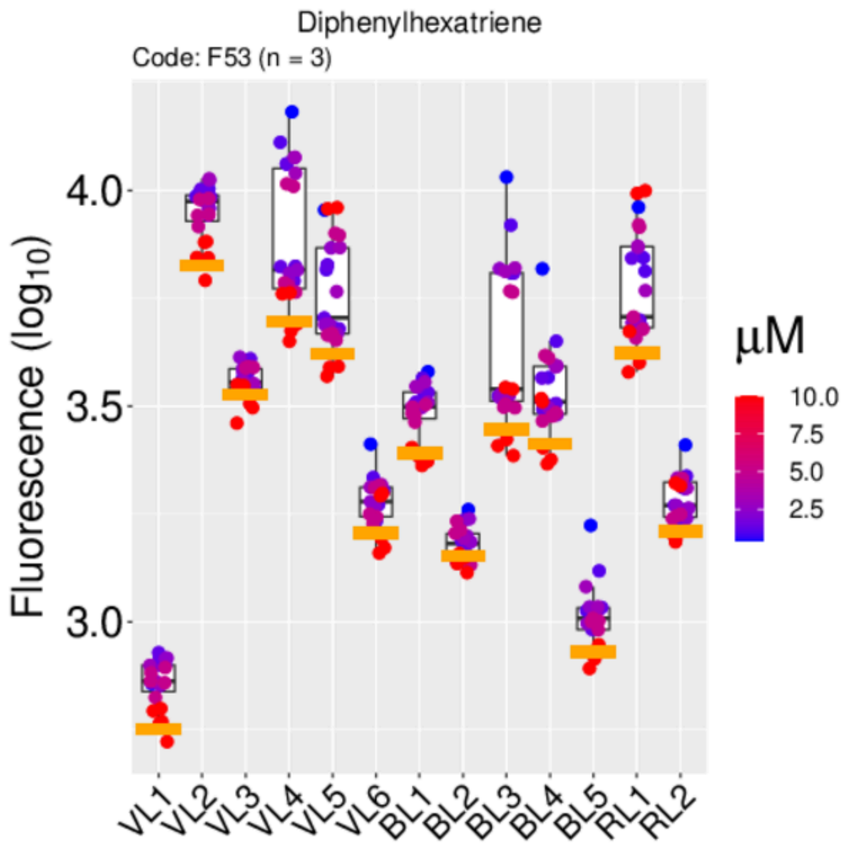


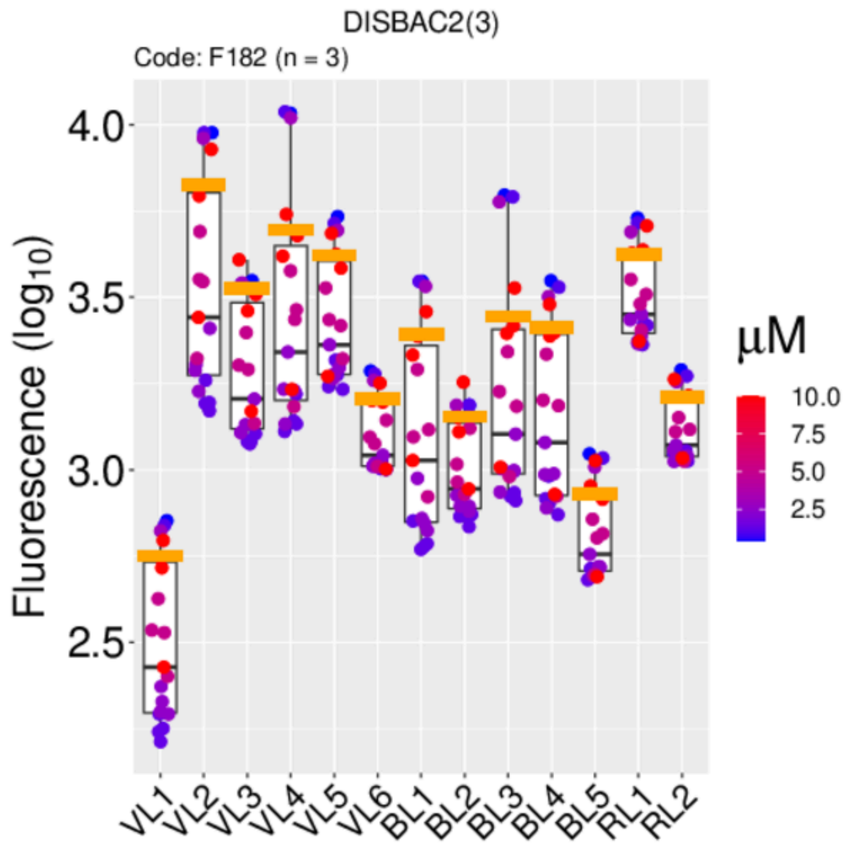
Demeclocycline
Code: F50 (n = 3)

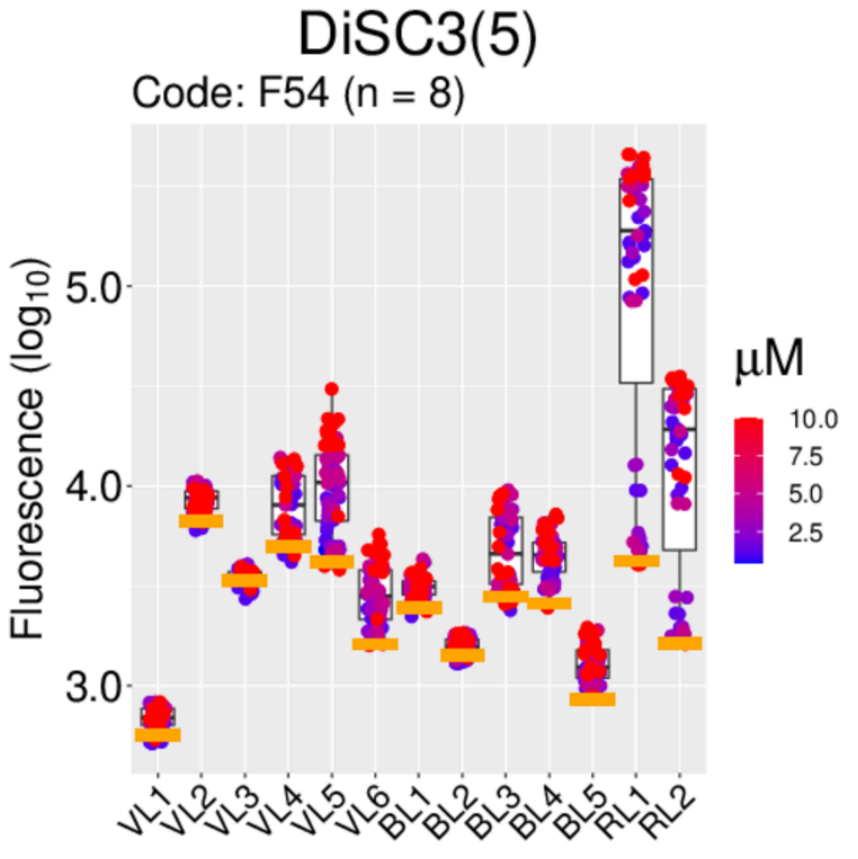


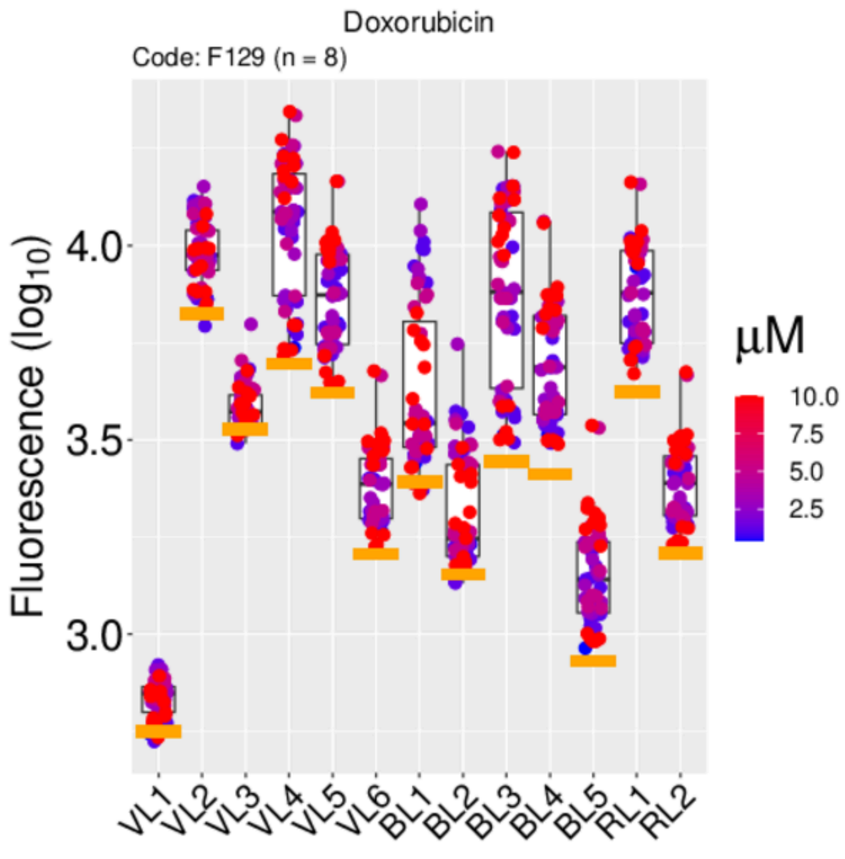
Difluoro{2−[(3,5−dimethyl−2H−pyrrol−2−ylidene−N)methyl]−3,5−dimethyl−1H−pyrrolato−N}boron (BODIPY tetra−methyl)
Code: F172 (n = 6)

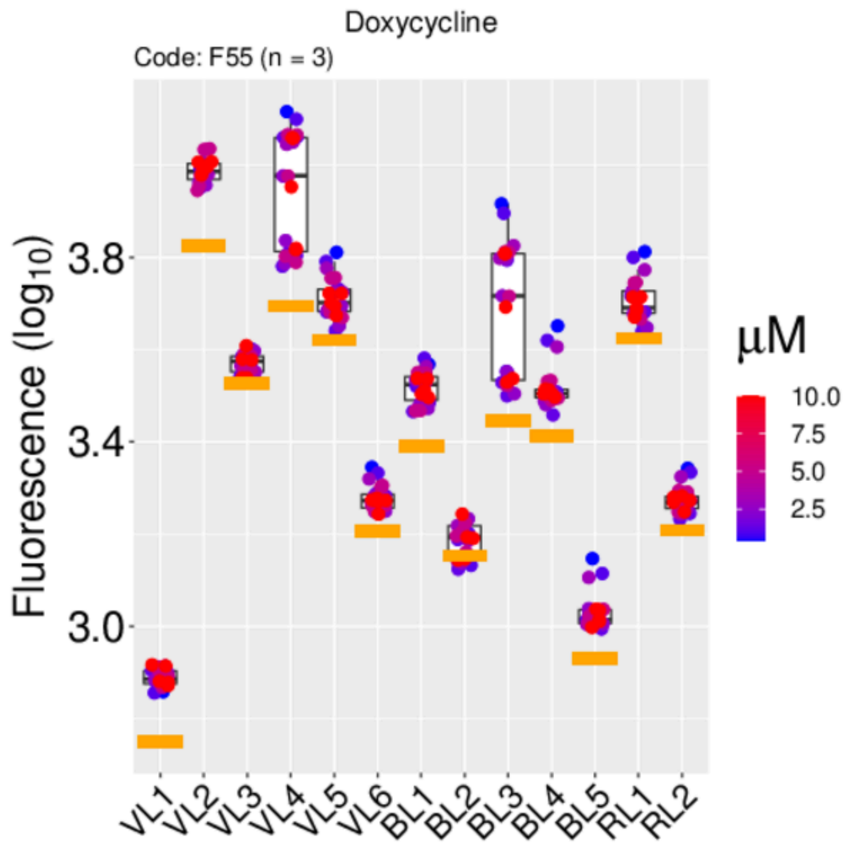


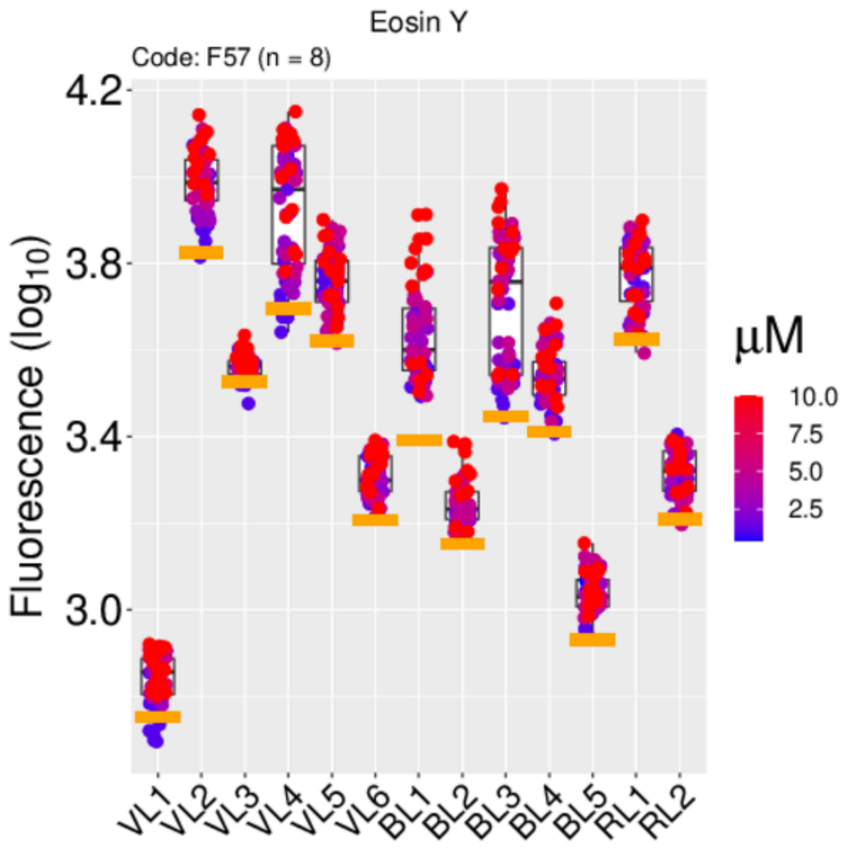

Diphenylhexatriene
Code: F53 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

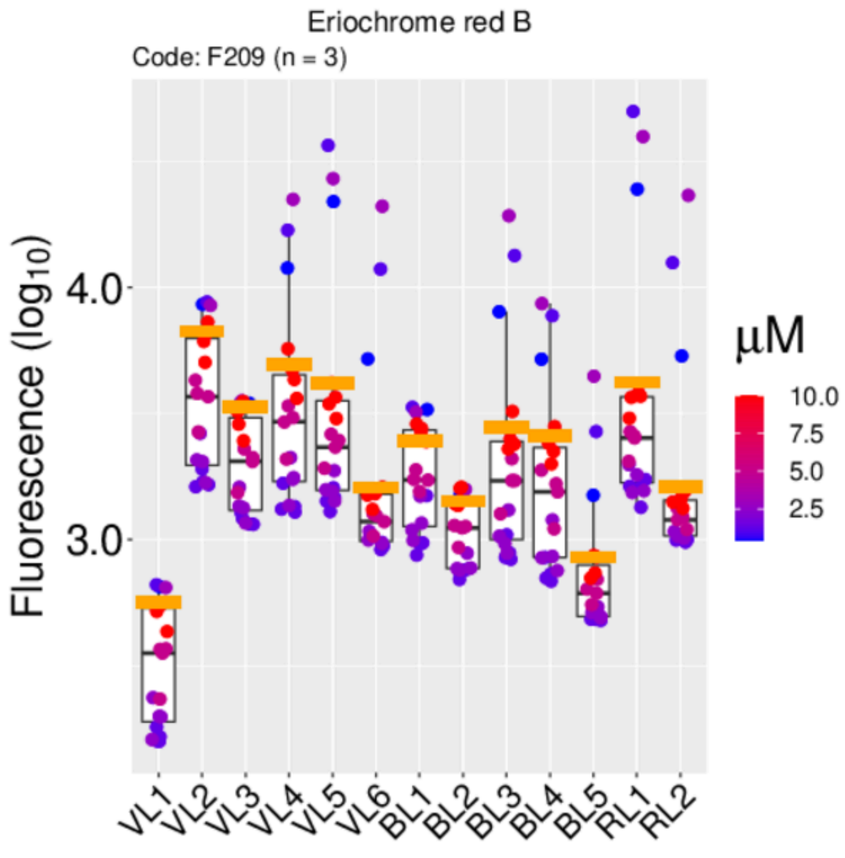

DISBAC2(3)
Code: F182 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
2.5
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

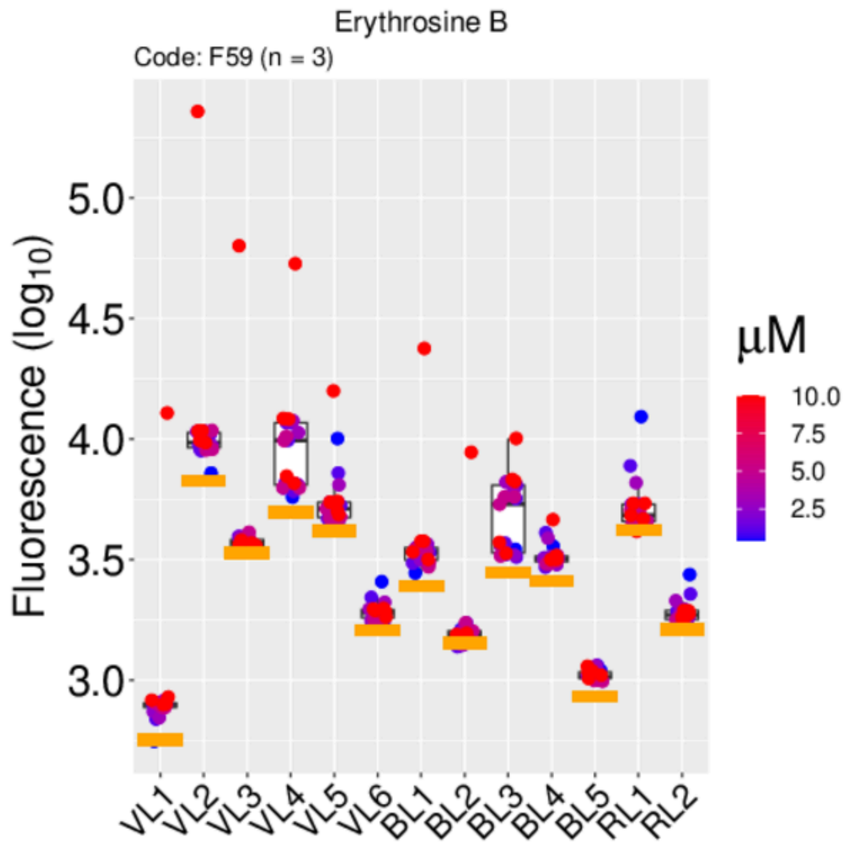

DiSC3(5)
Code: F54 (n = 8)
Fluorescence (log10)
5.0
4.0
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

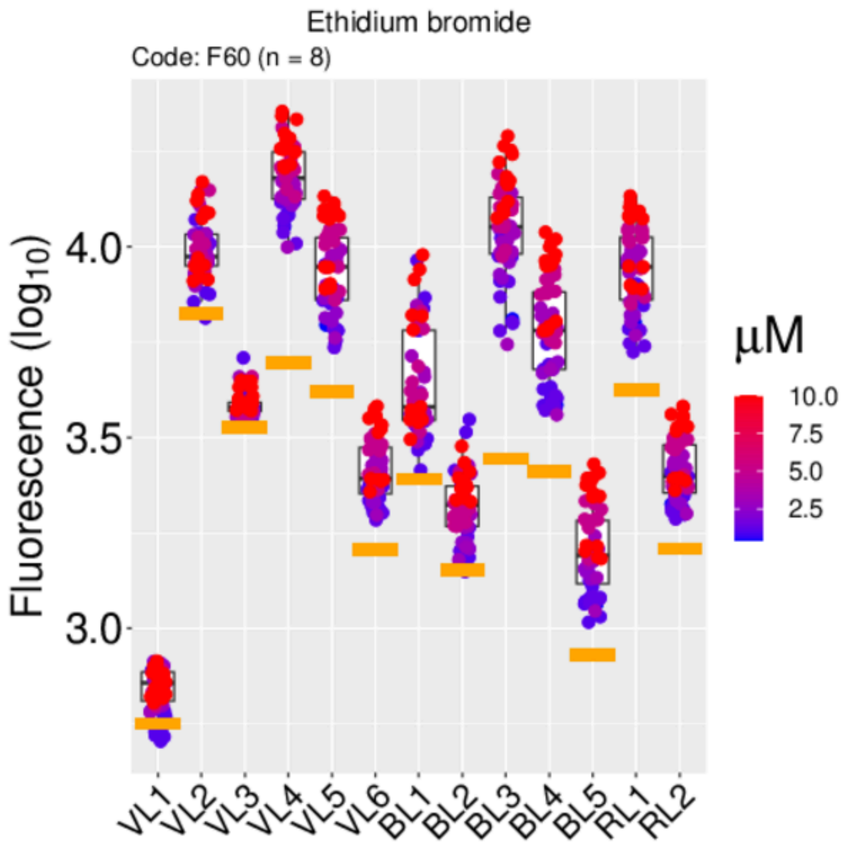

Doxorubicin
Code: F129 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

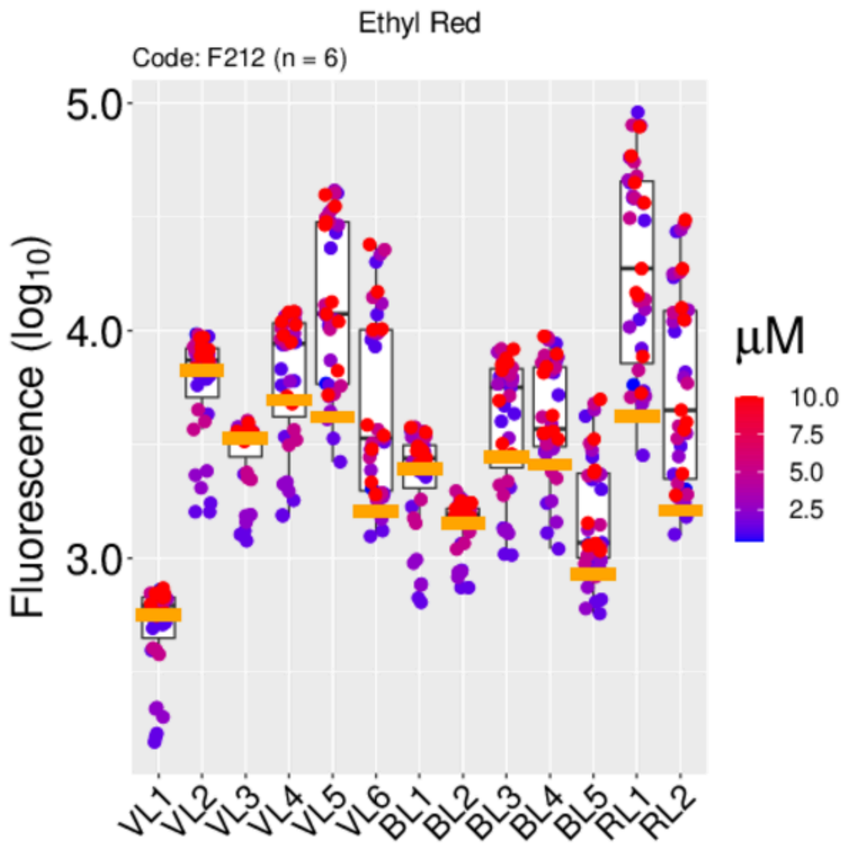

Doxycycline
Code: F55 (n = 3)
Fluorescence (log10)
3.8
3.4
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

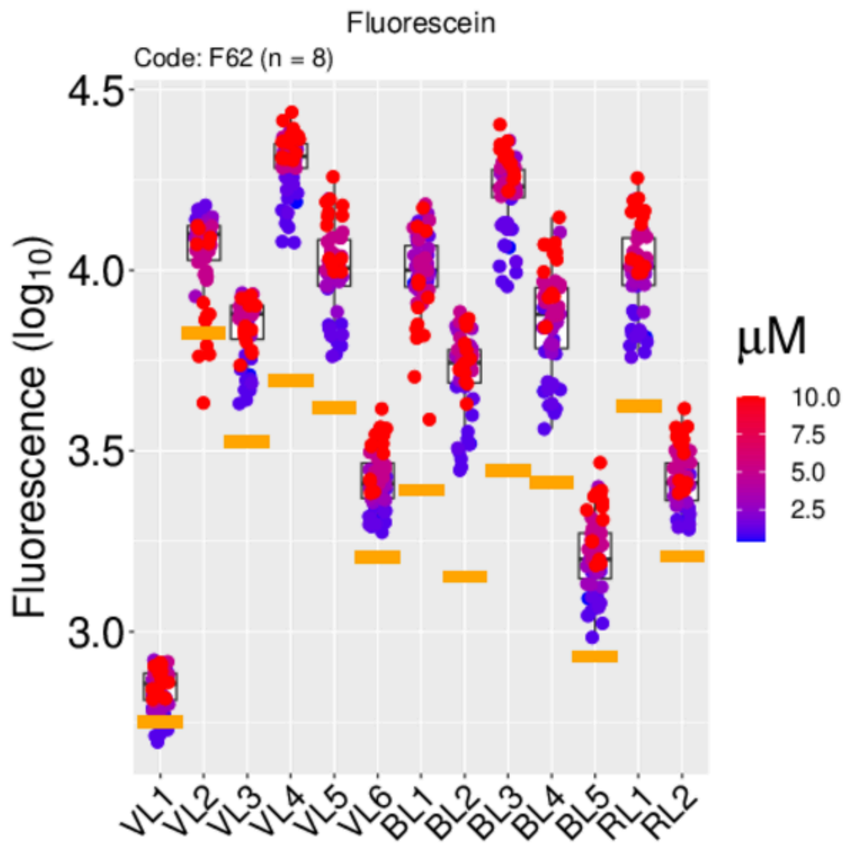

Eosin Y
Code: F57 (n = 8)
Fluorescence (log10)
4.2
3.8
3.4
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

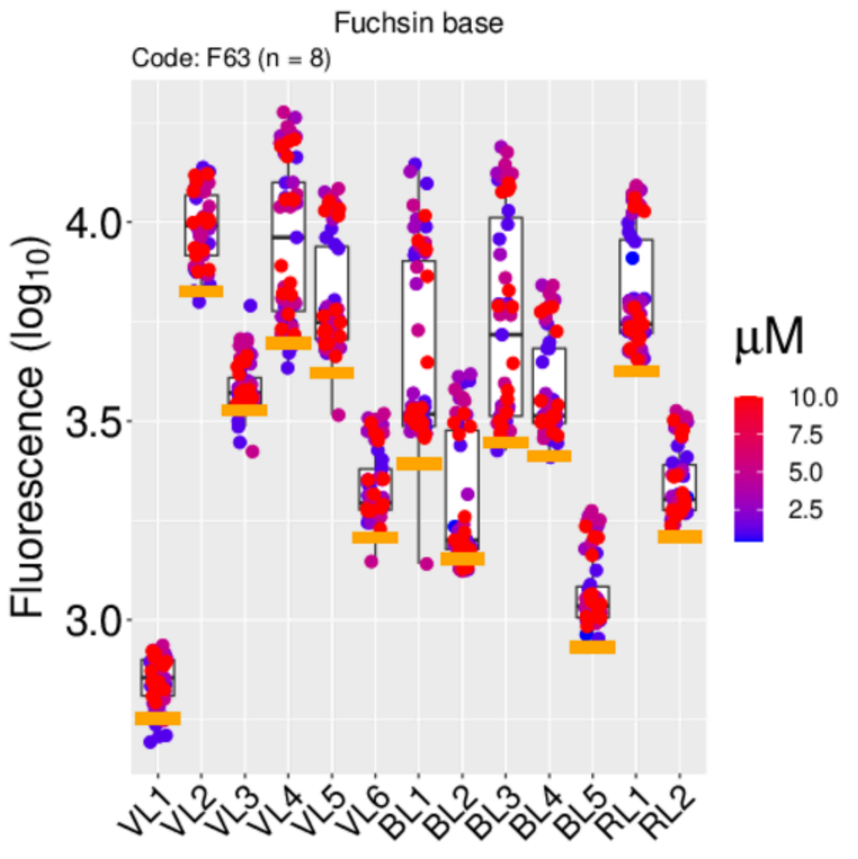

Eriochrome red B
Code: F209 (n = 3)
Fluorescence (log10)
4.0
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

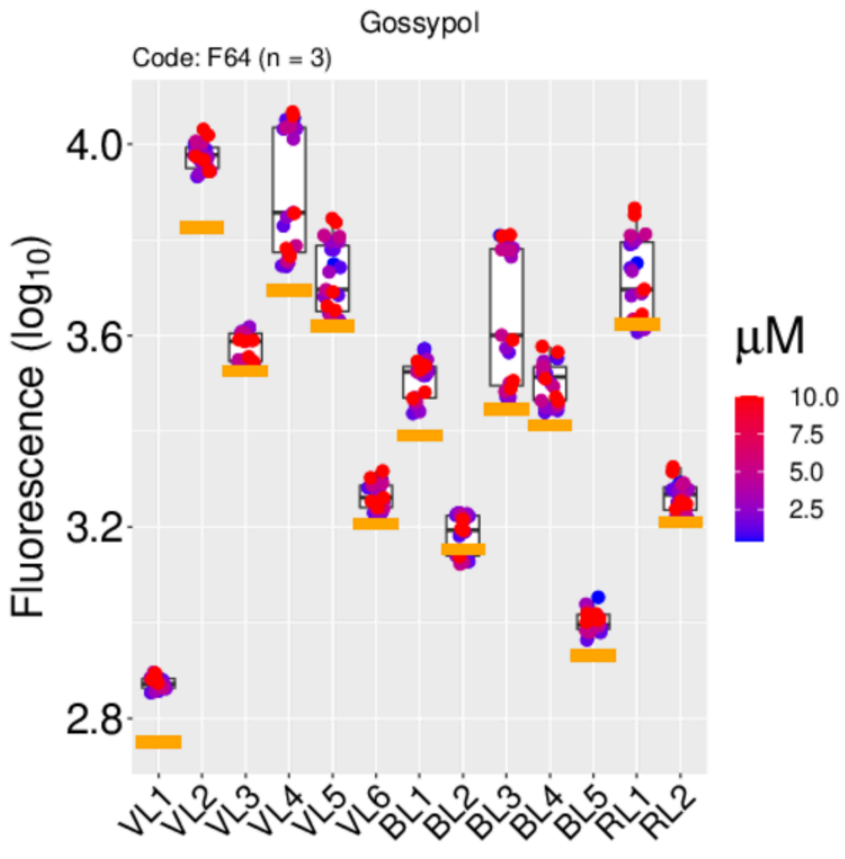

Erythrosine B
Code: F59 (n = 3)
Fluorescence (log10)
5.0
4.5
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

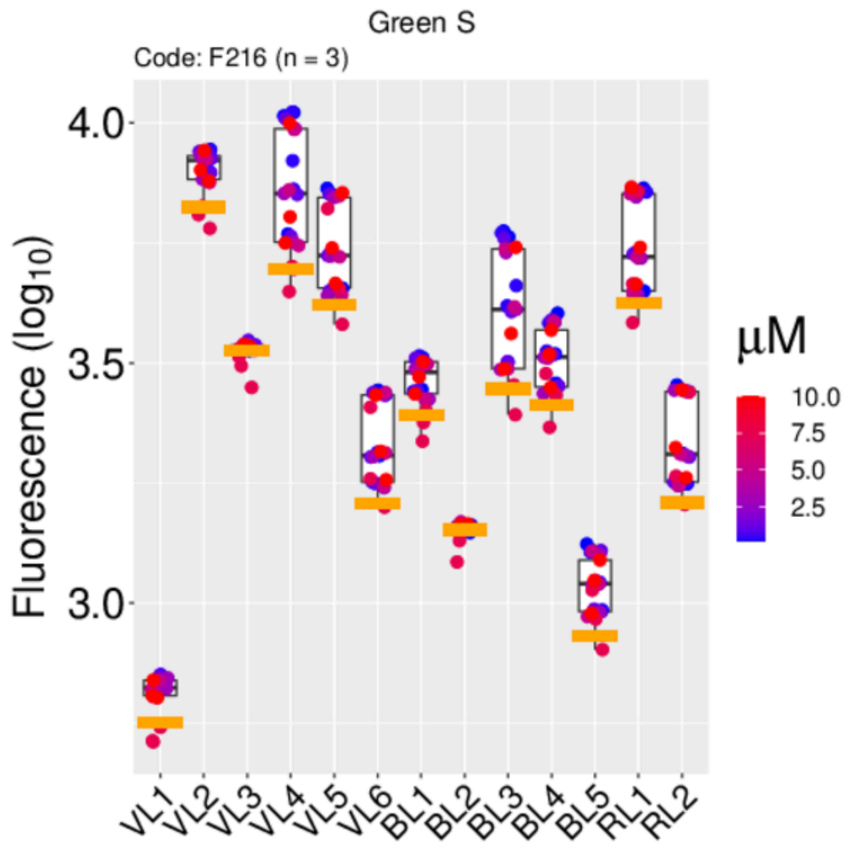

Ethidium bromide
Code: F60 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

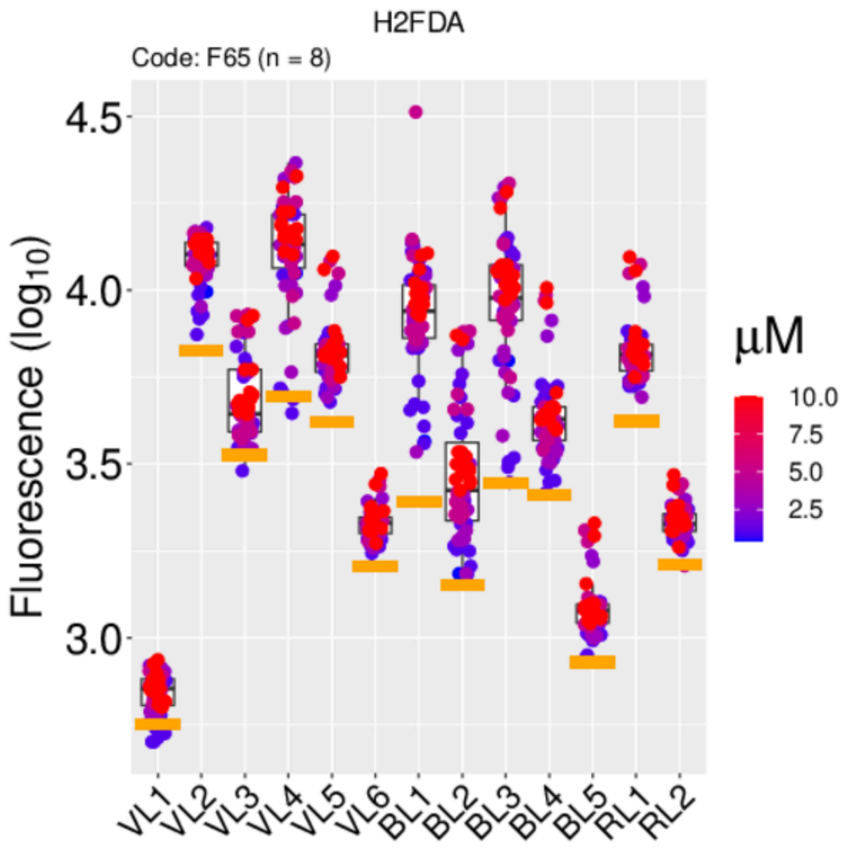

Ethyl Red
Code: F212 (n = 6)
Fluorescence (log10)
5.0
4.0
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Fluorescein
Code: F62 (n = 8)
Fluorescence (log10)
4.5
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

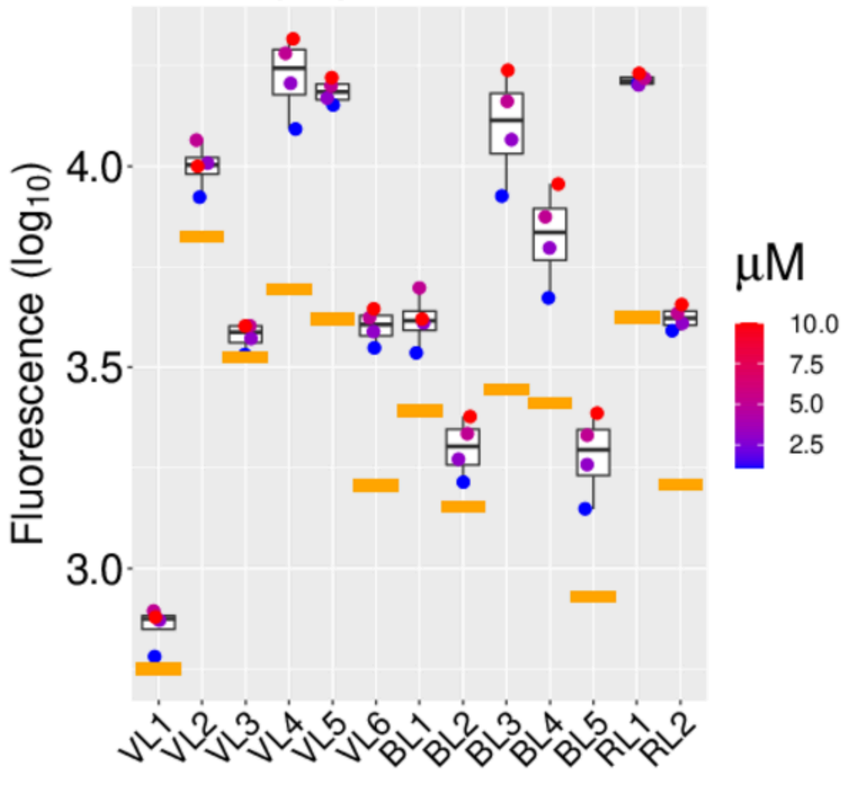

Fuchsin base
Code: F63 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Gossypol
Code: F64 (n = 3)
Fluorescence (log10)
4.0
3.6
3.2
2.8
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

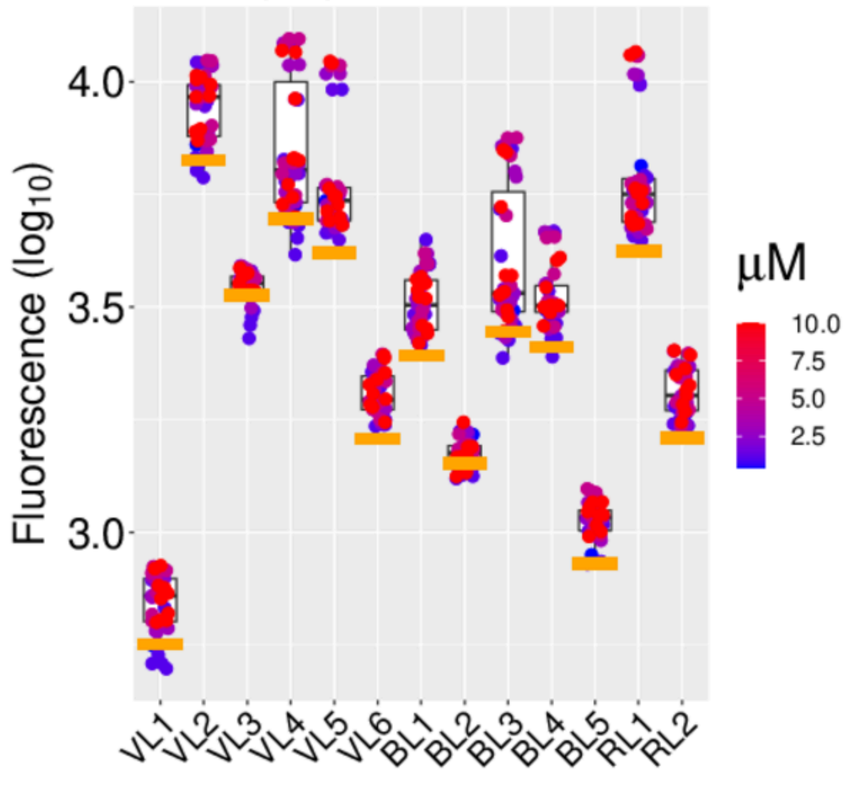

Green S
Code: F216 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


H2FDA
Code: F65 (n = 8)
Fluorescence (log10)
4.5
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

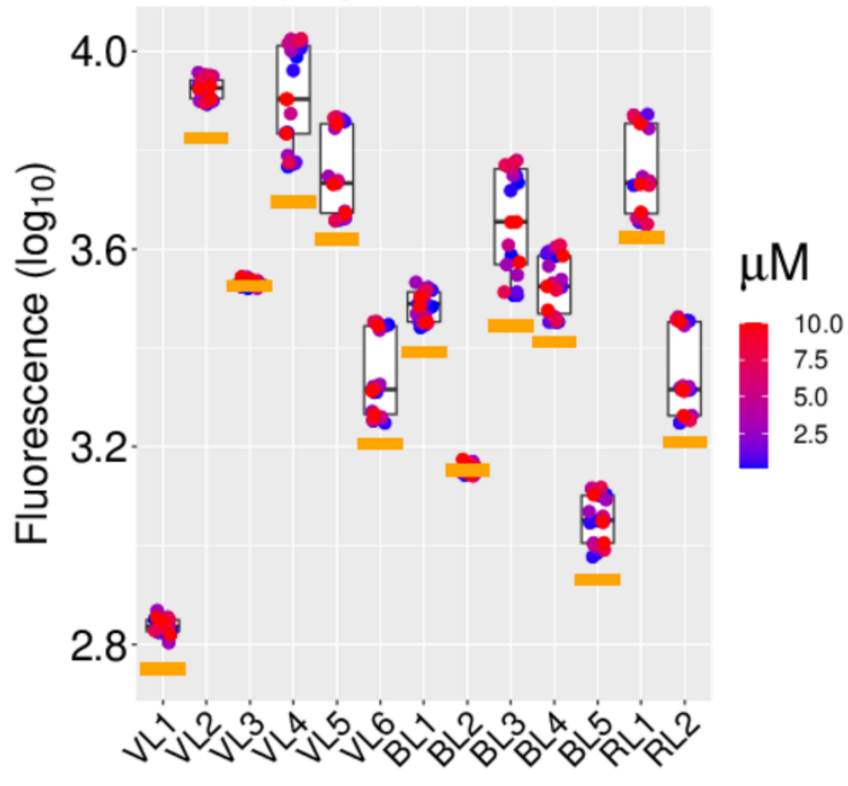
Hexidium iodide
Code: F219 (n = 1)



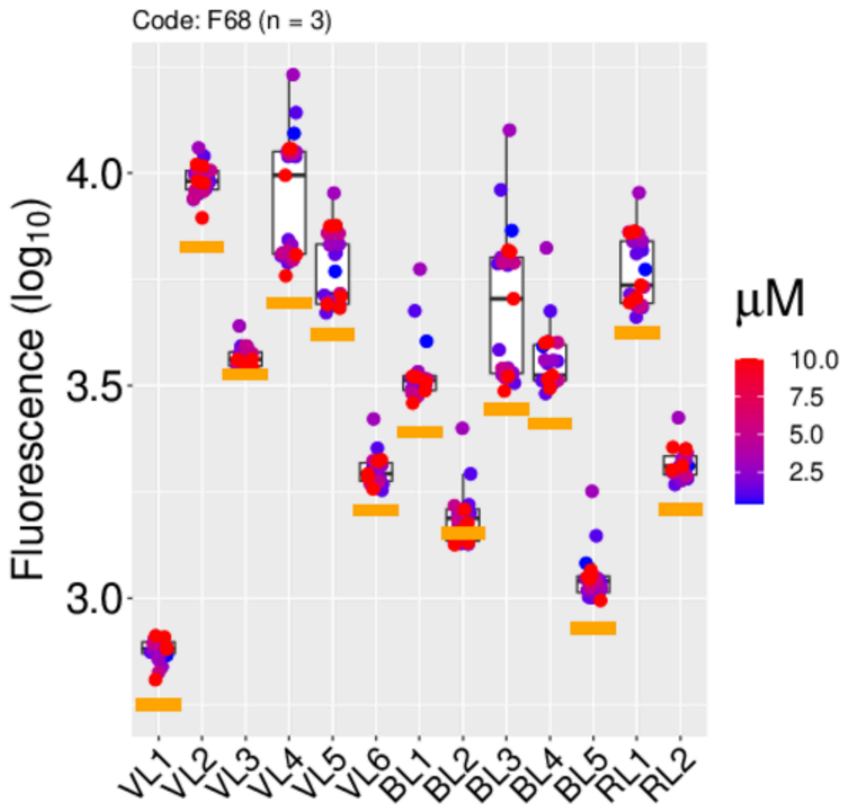
Indigo carmine
Code: F66 (n = 6)



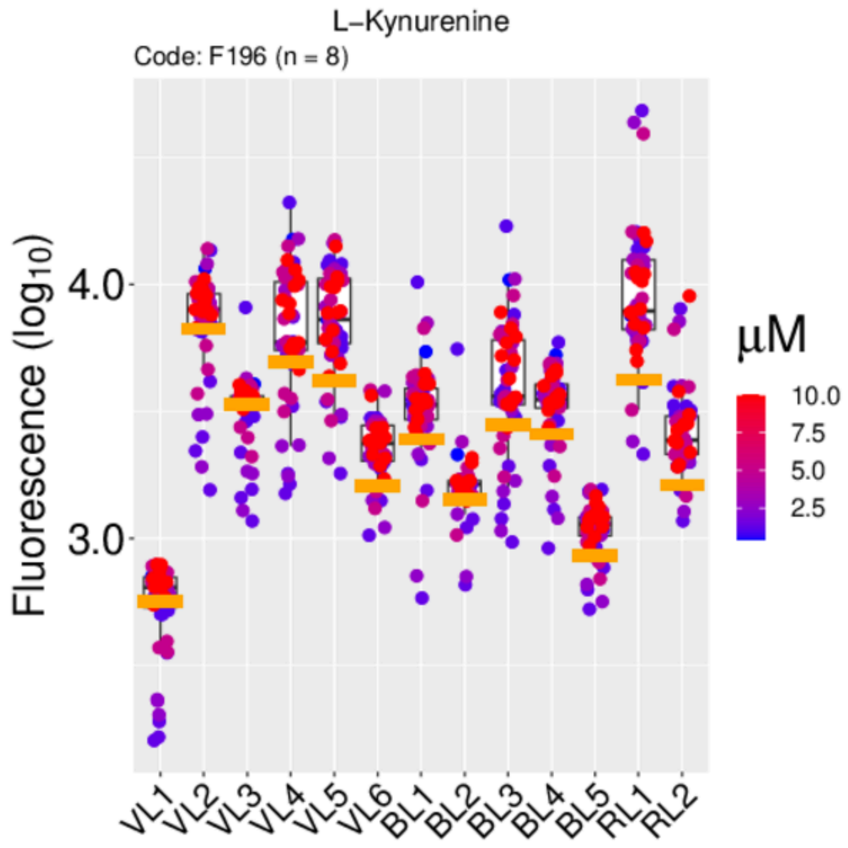
Isoindigotin
Code: F213 (n = 3)



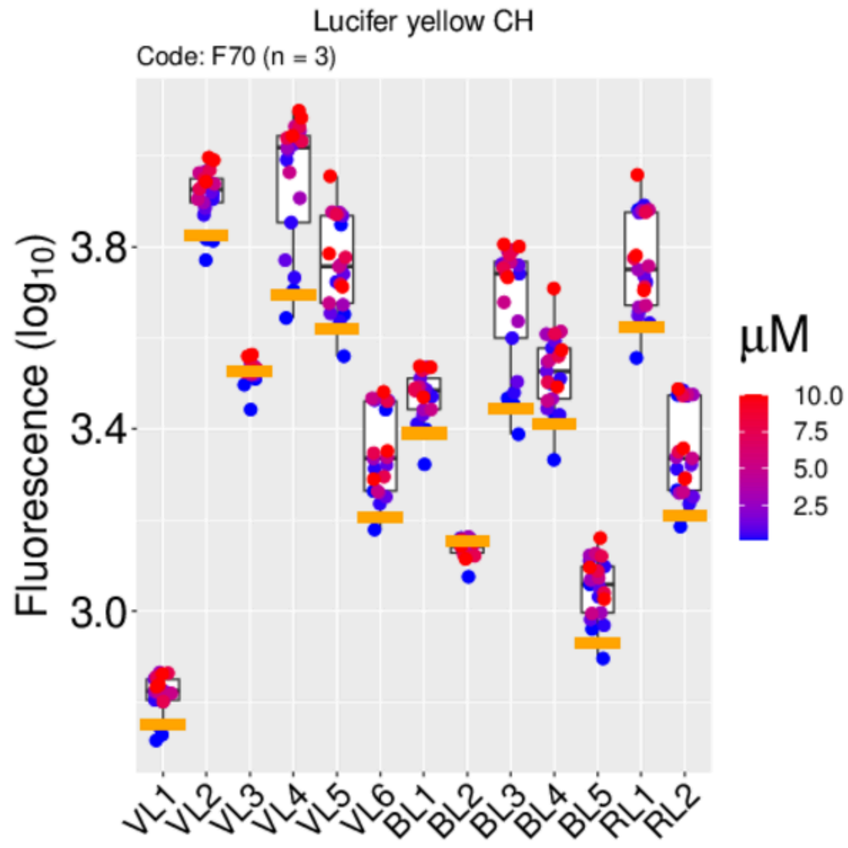
Janus Green B
Code: F68 (n = 3)



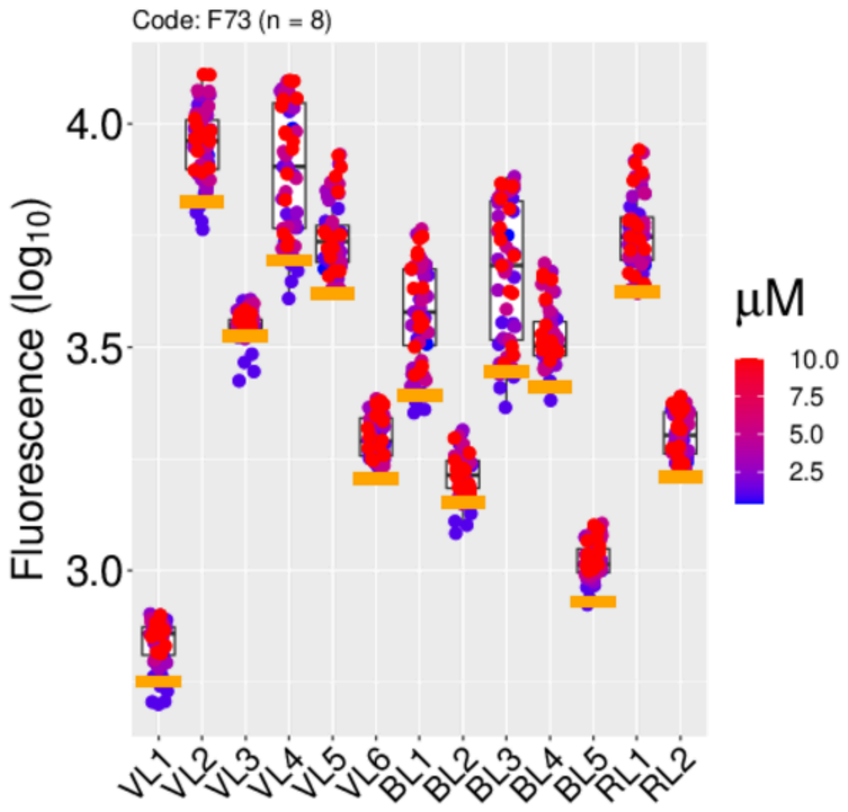
L−Kynurenine
Code: F196 (n = 8)



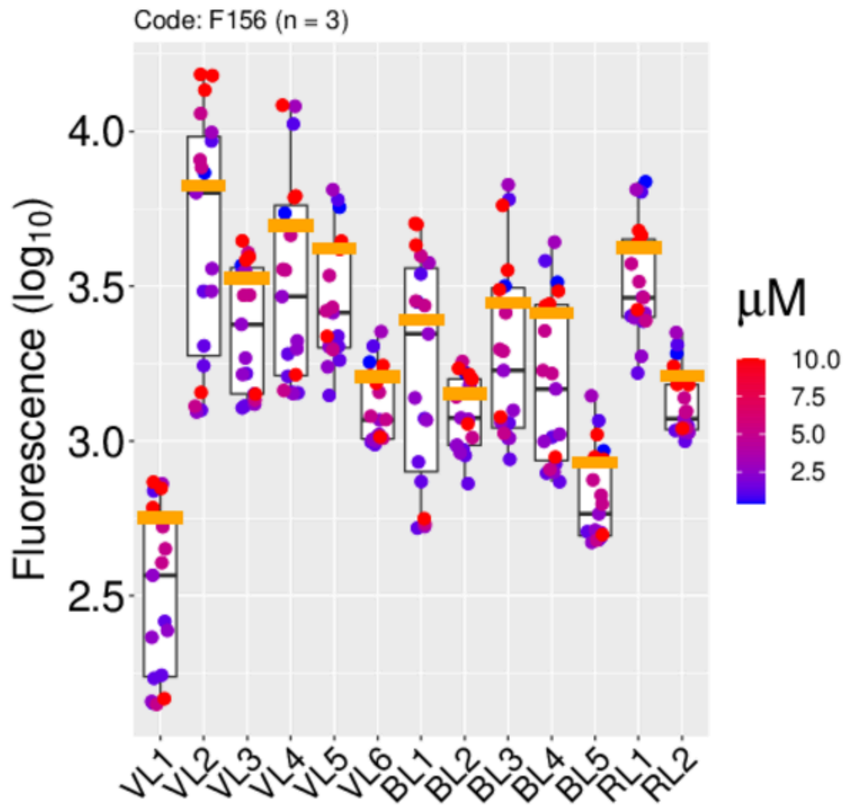
Lucifer yellow CH
Code: F70 (n = 3)



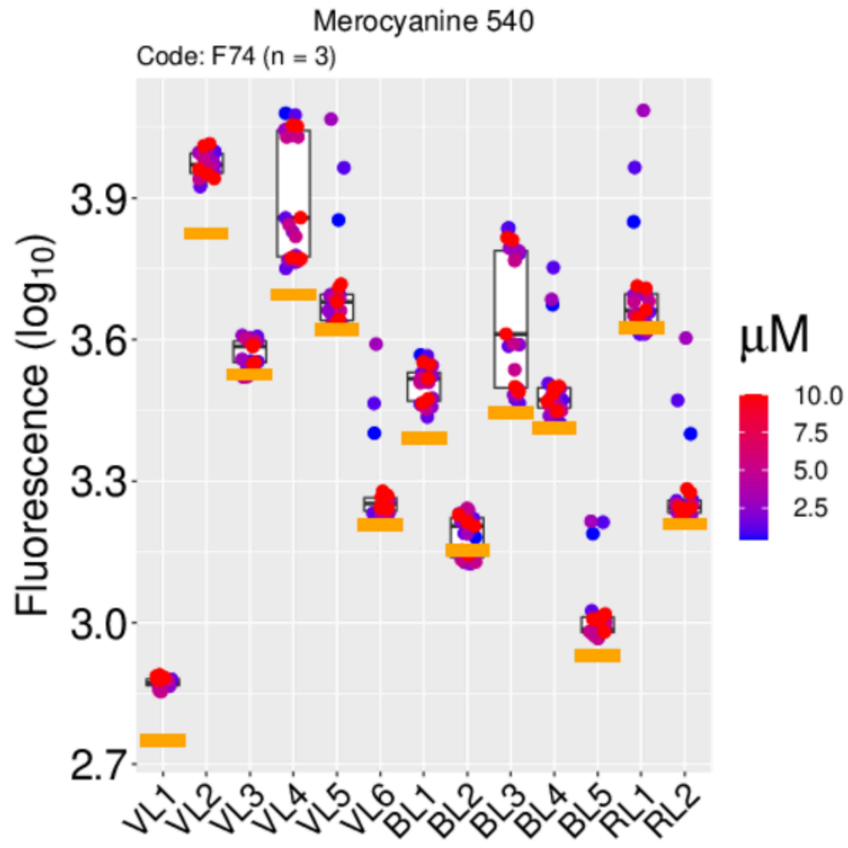
Malachite Green
Code: F73 (n = 8)



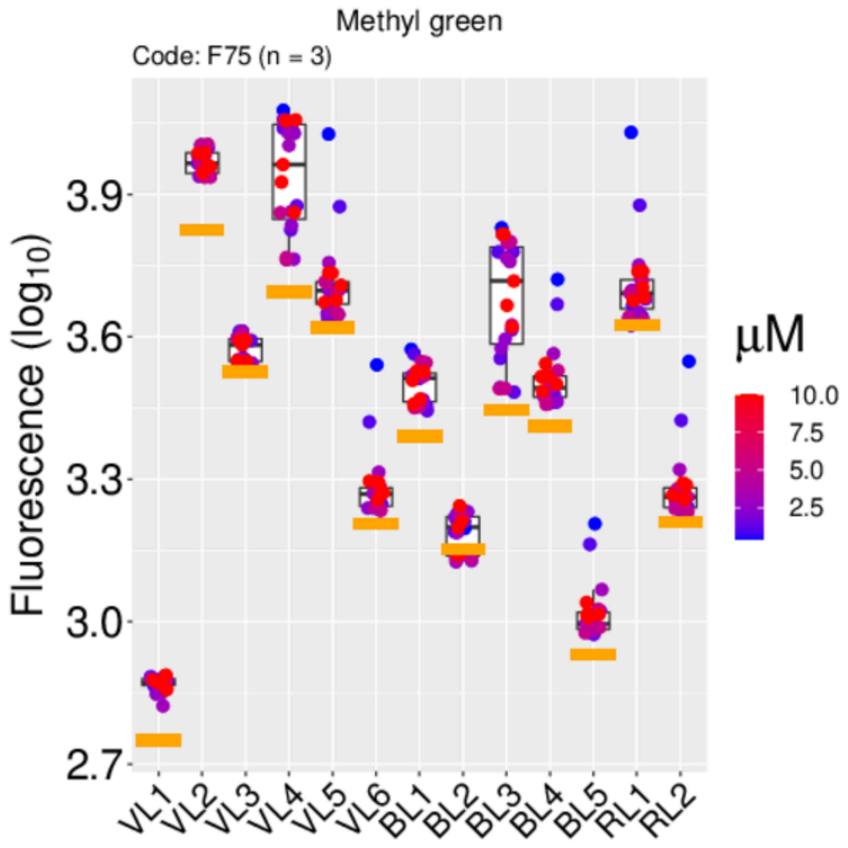
Meldola Blue
Code: F156 (n = 3)



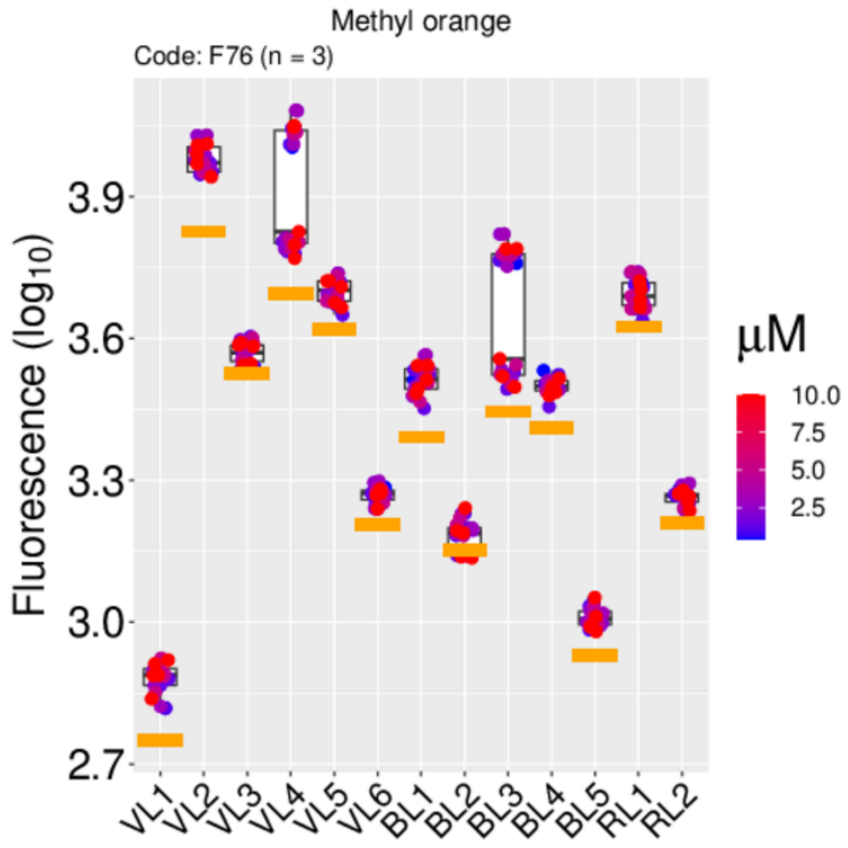
Merocyanine 540
Code: F74 (n = 3)



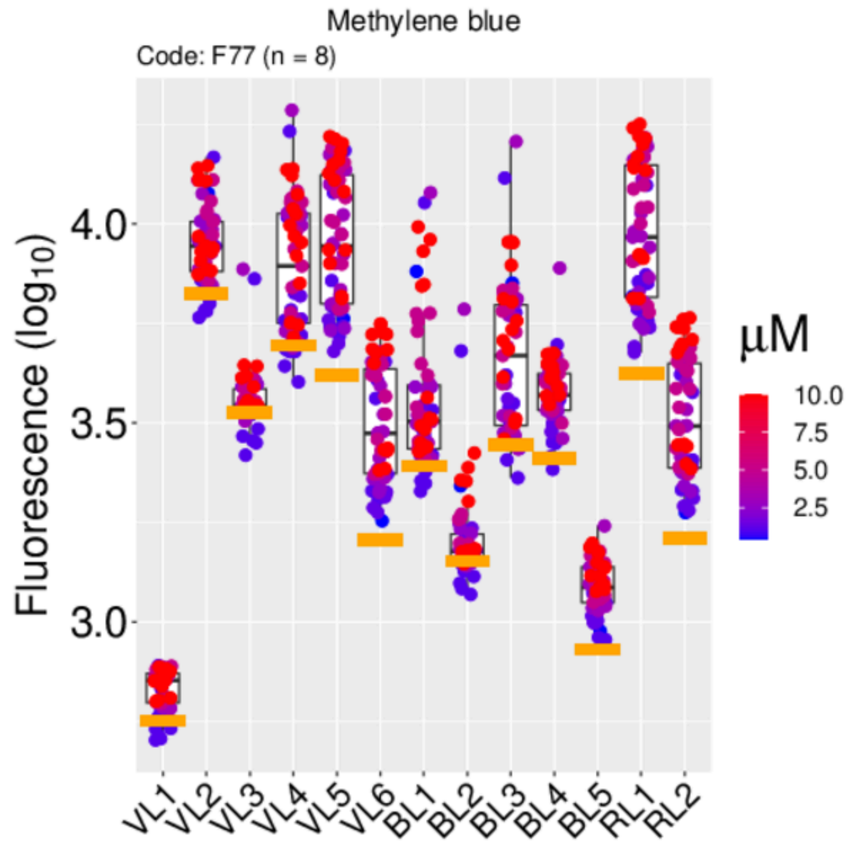
Methyl green
Code: F75 (n = 3)



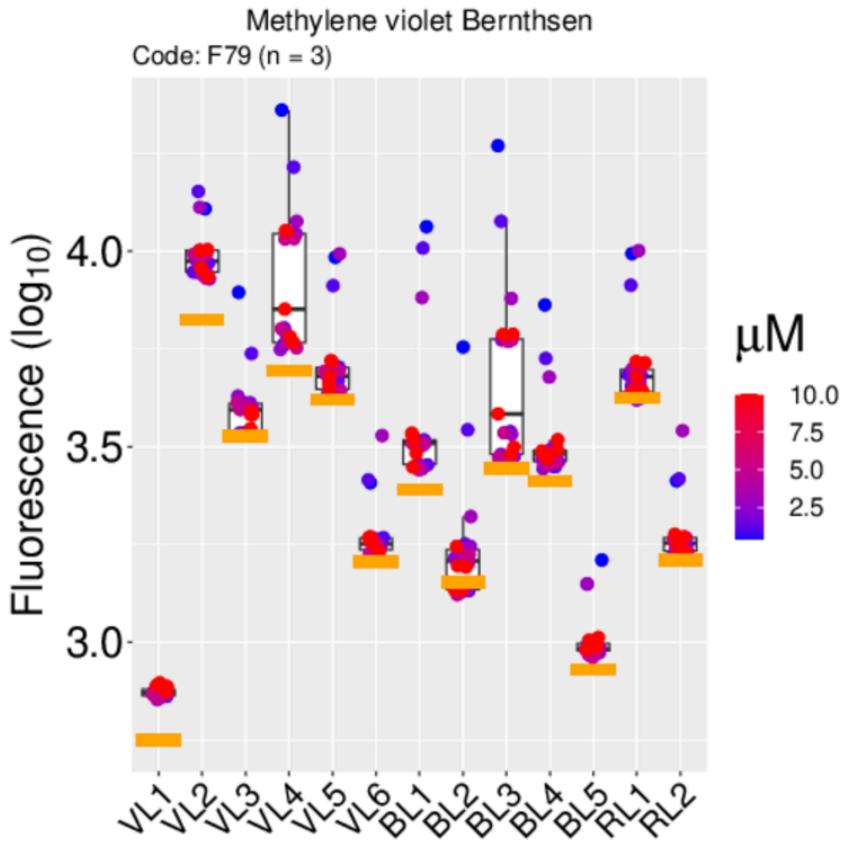
Methyl orange
Code: F76 (n = 3)



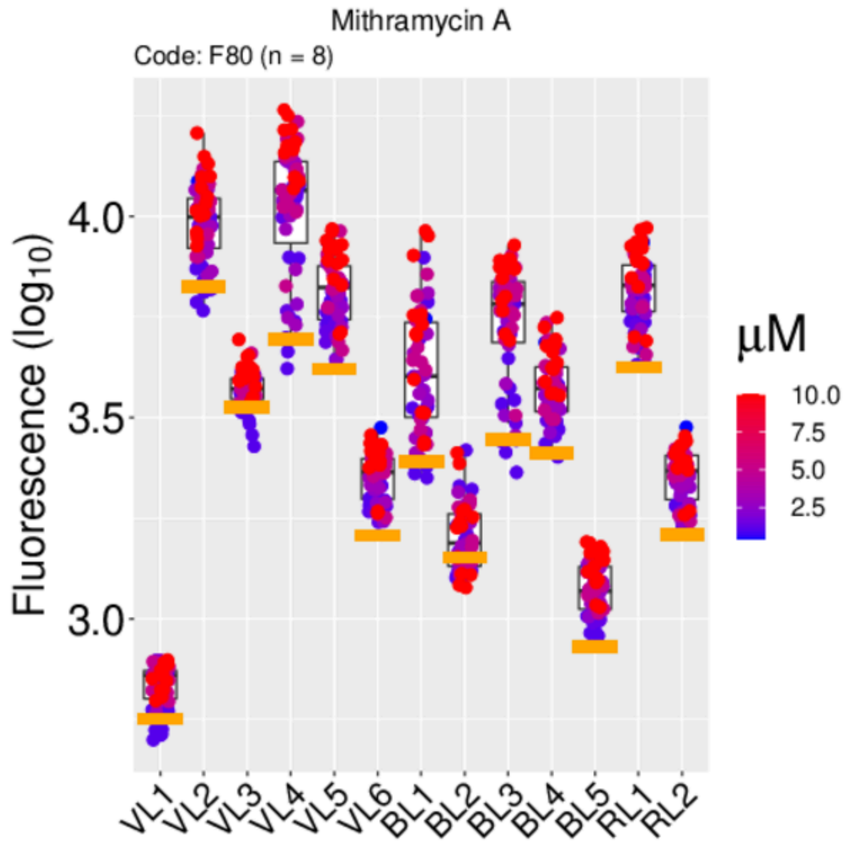
Methylene blue
Code: F77 (n = 8)



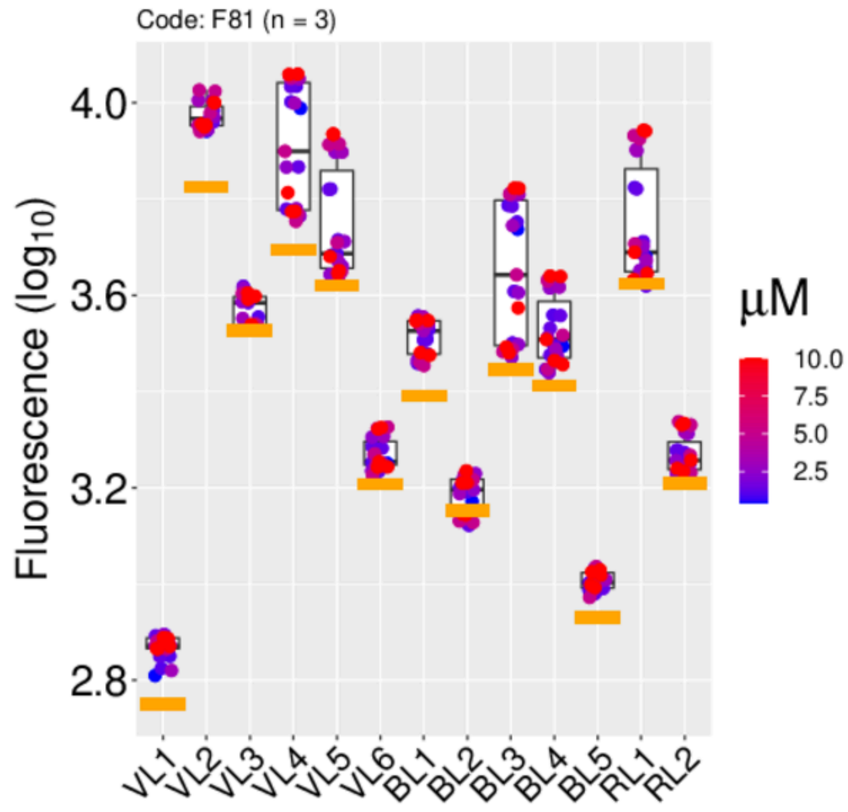
Methylene violet Bernthsen
Code: F79 (n = 3)



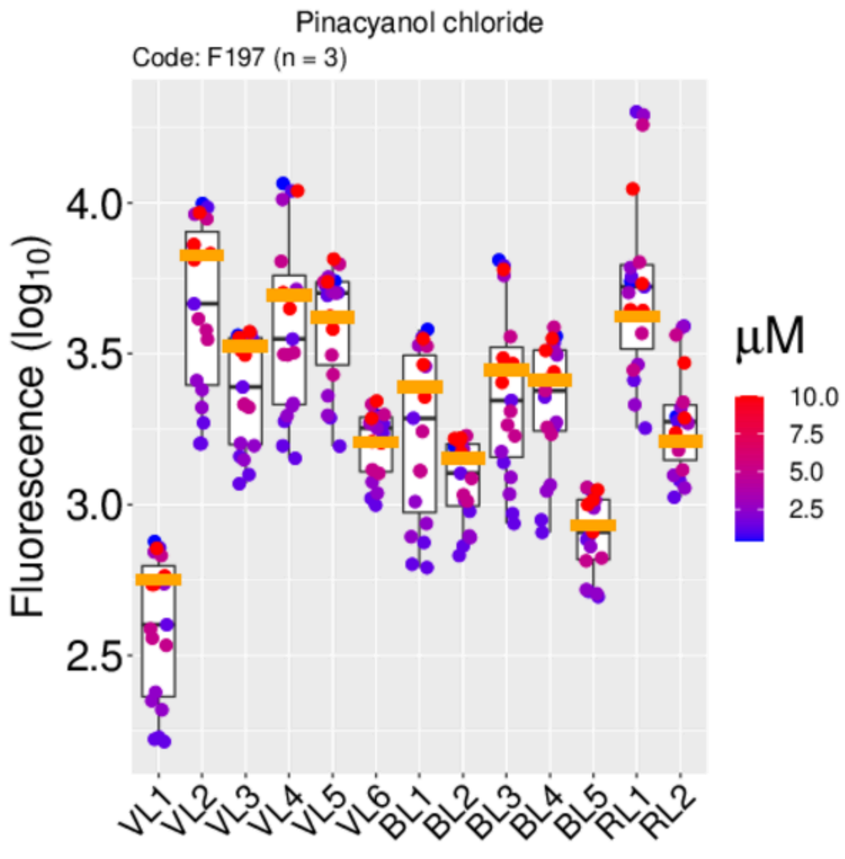
Mithramycin A
Code: F80 (n = 8)

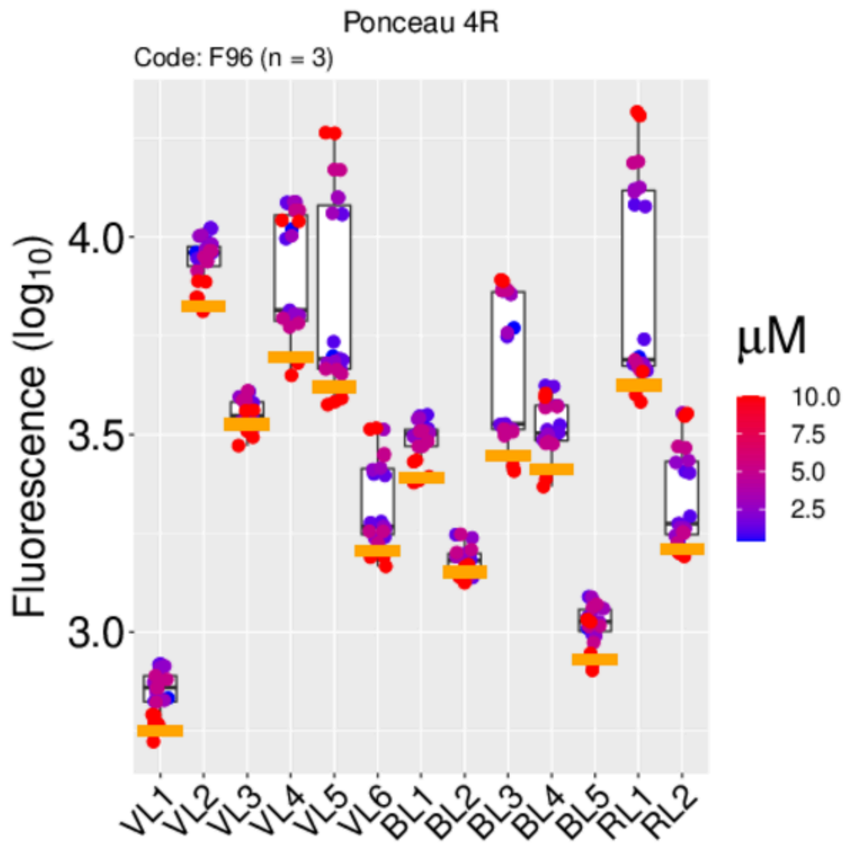


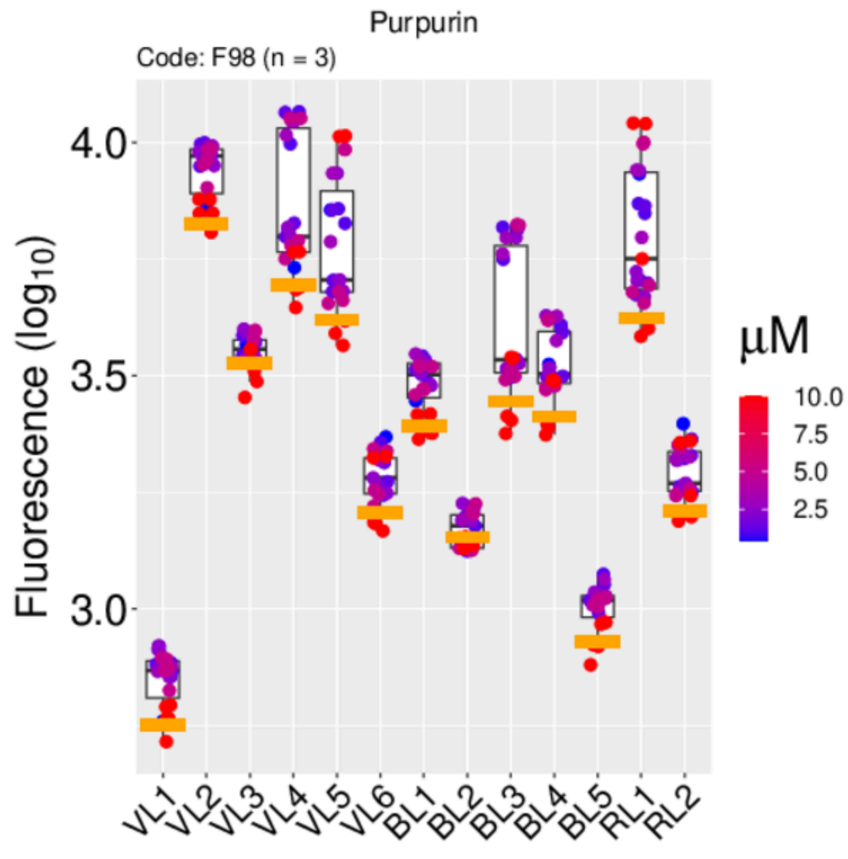
Mitoxantrone
Code: F81 (n = 3)

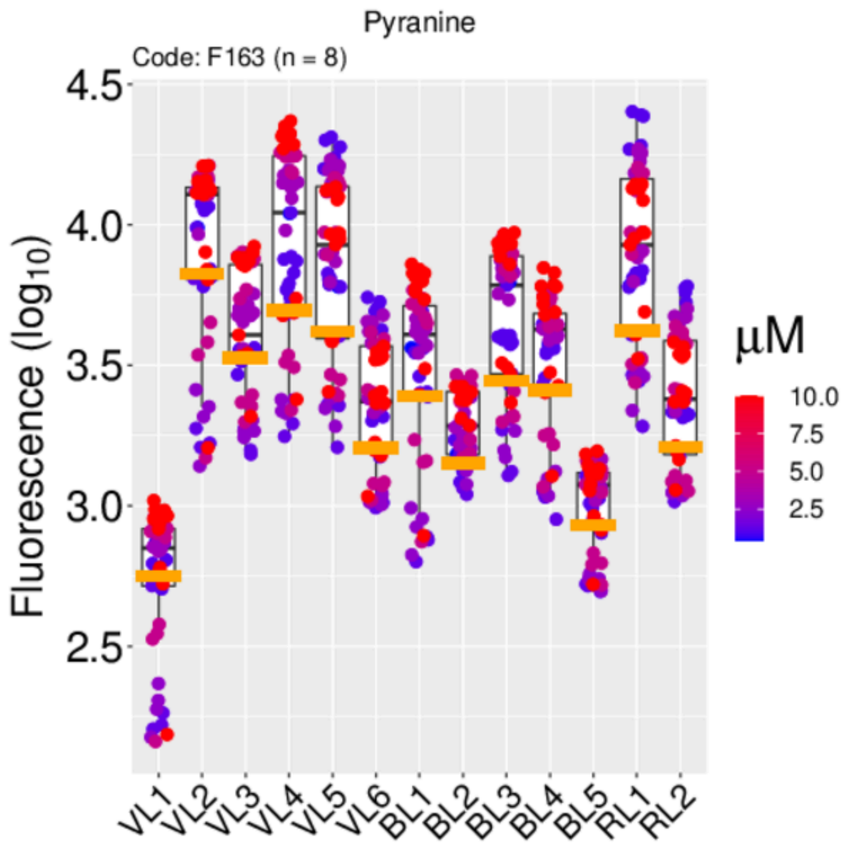


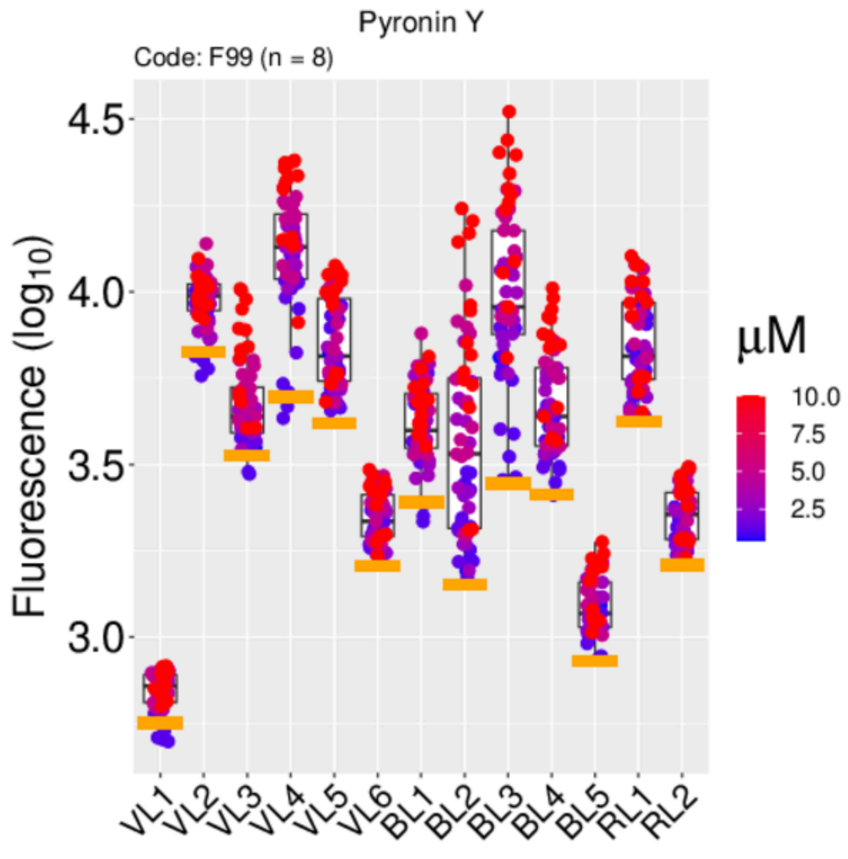
Monochlorobimane
Code: F83 (n = 3)
Mordant Orange 1
Code: F215 (n = 3)
Morin
Code: F158 (n = 1)
Neutral Red
Code: F84 (n = 8)
Nile blue
Code: F85 (n = 3)
Nile red
Code: F86 (n = 7)
Oil Red O
Code: F88 (n = 3)
Oxazine 1
Code: F160 (n = 8)
Oxazine 170
Code: F191 (n = 8)
Oxonol
Code: F194 (n = 3)
Oxonol V
Code: F90 (n = 8)
Paclitaxel
Code: F130 (n = 6)
Pararosaniline
Code: F92 (n = 3)
Phenol Red
Code: F93 (n = 8)
Phloxine B
Code: F179 (n = 3)
Fluorescence (log_{10})
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

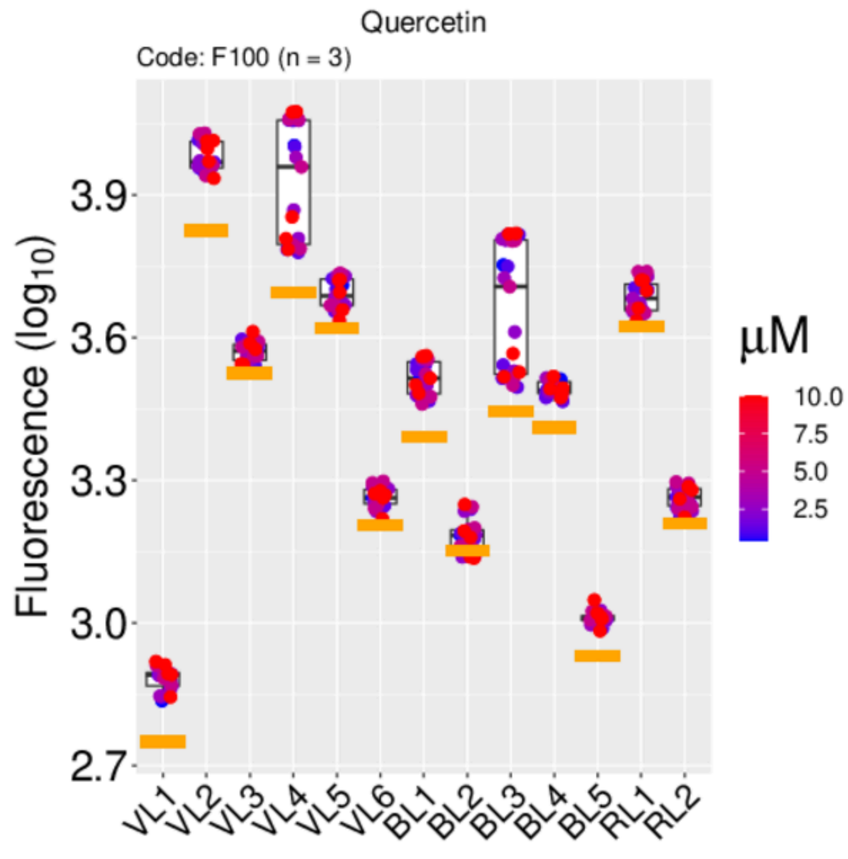

Pinacyanol chloride
Code: F197 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
2.5
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

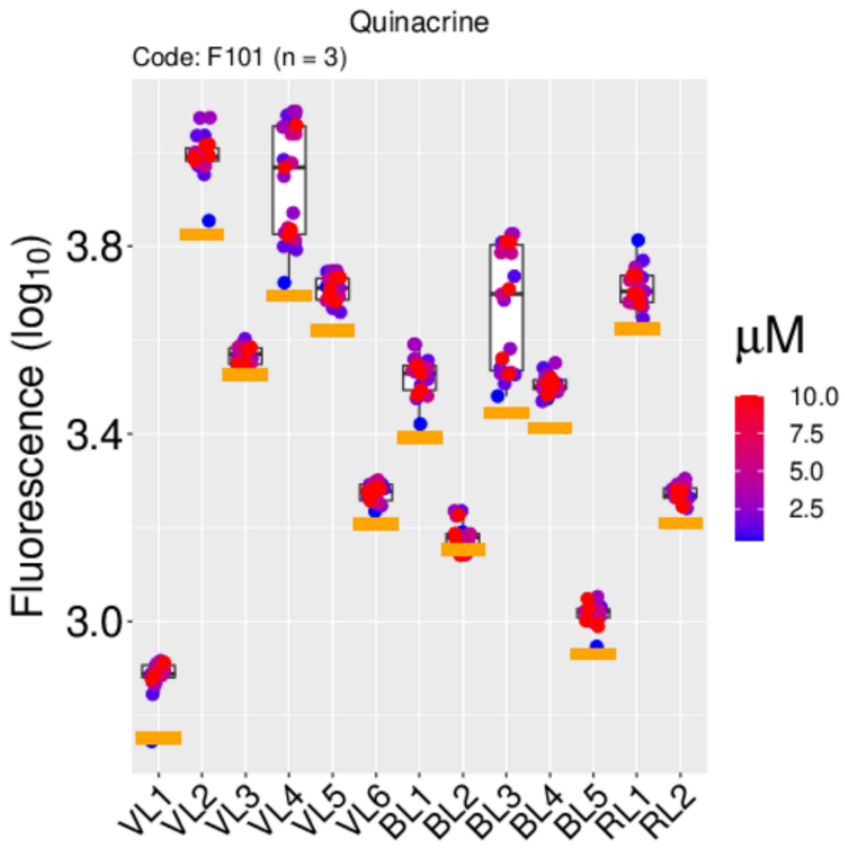

Ponceau 4R
Code: F96 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

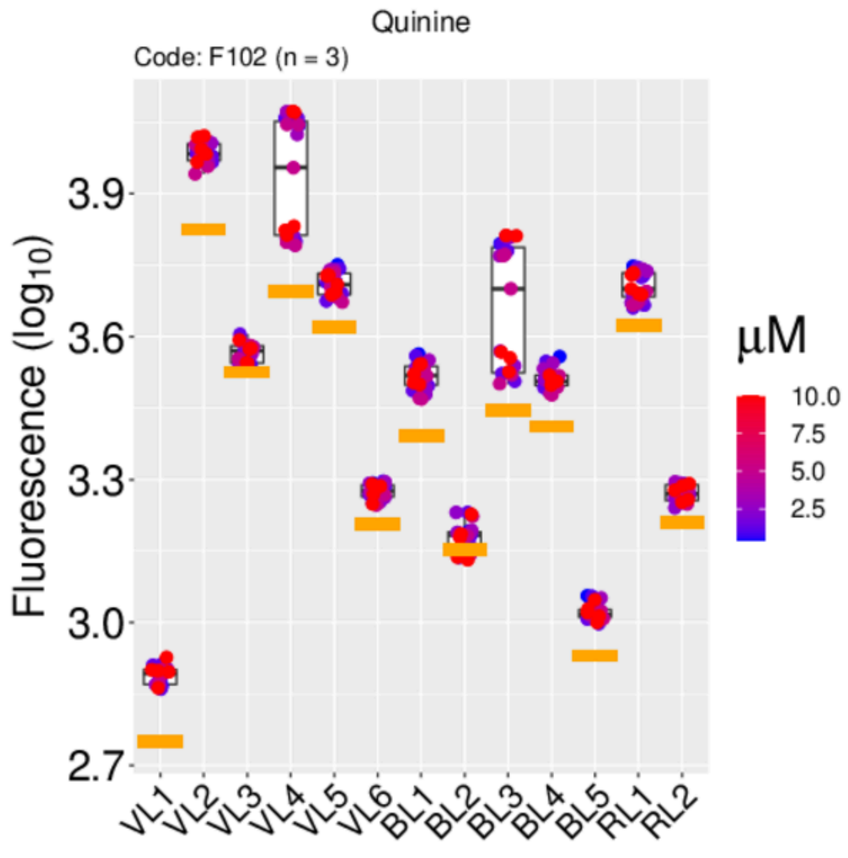

Purpurin
Code: F98 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

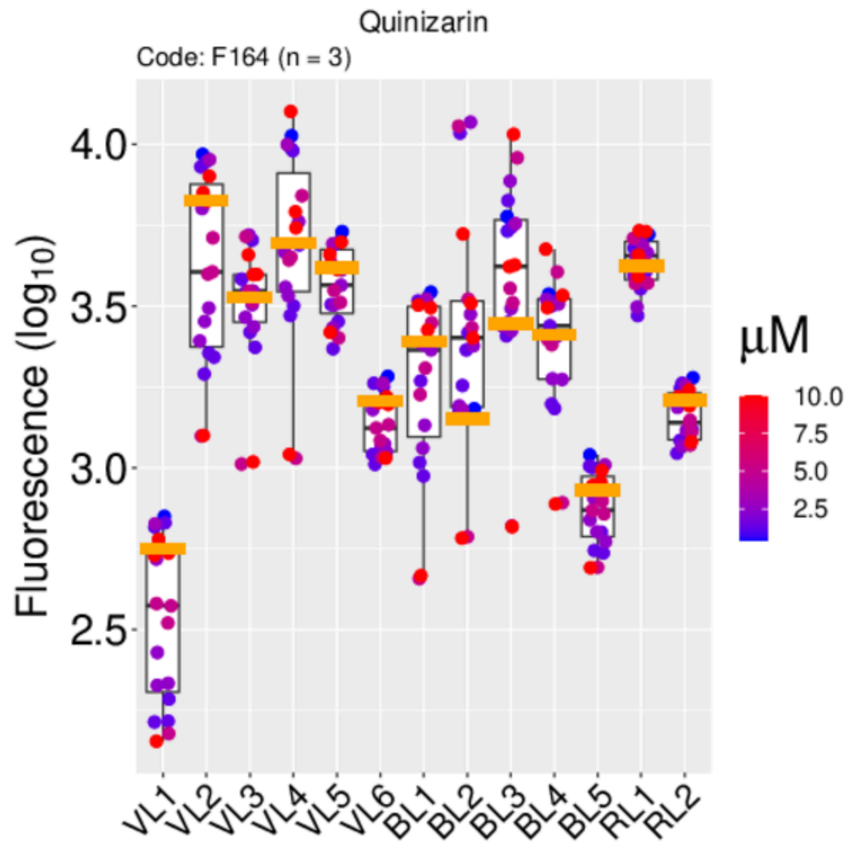

Pyranine
Code: F163 (n = 8)
Fluorescence (log10)
4.5
4.0
3.5
3.0
2.5
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

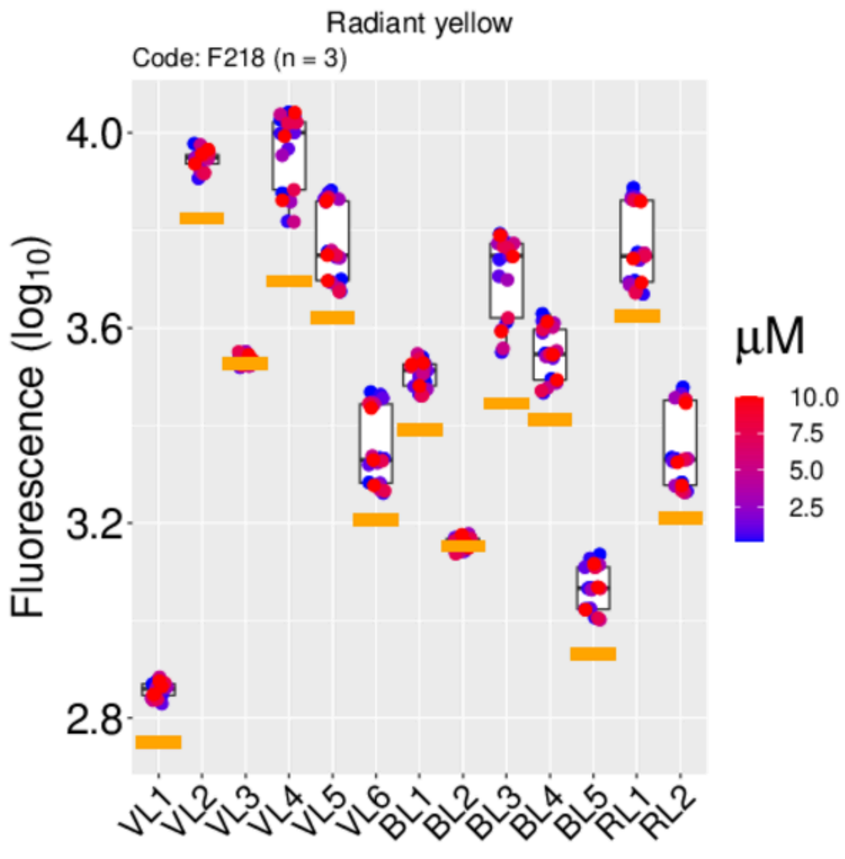

Pyronin Y
Code: F99 (n = 8)
Fluorescence (log10)
4.5
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

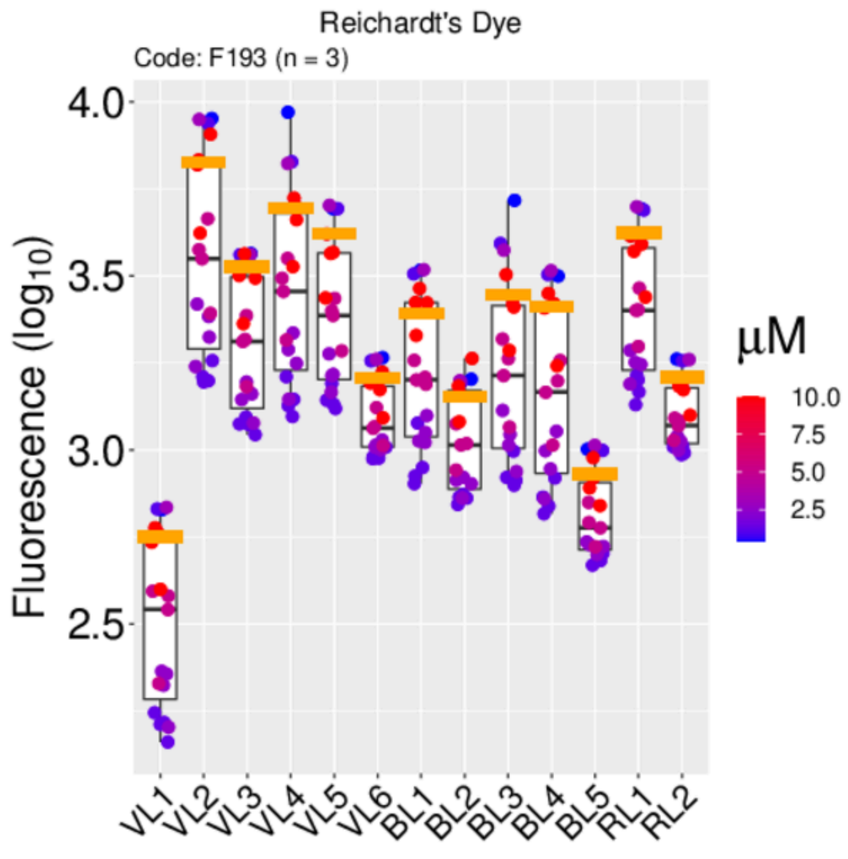

Quercetin
Code: F100 (n = 3)
Fluorescence (log10)
3.9
3.6
3.3
3.0
2.7
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

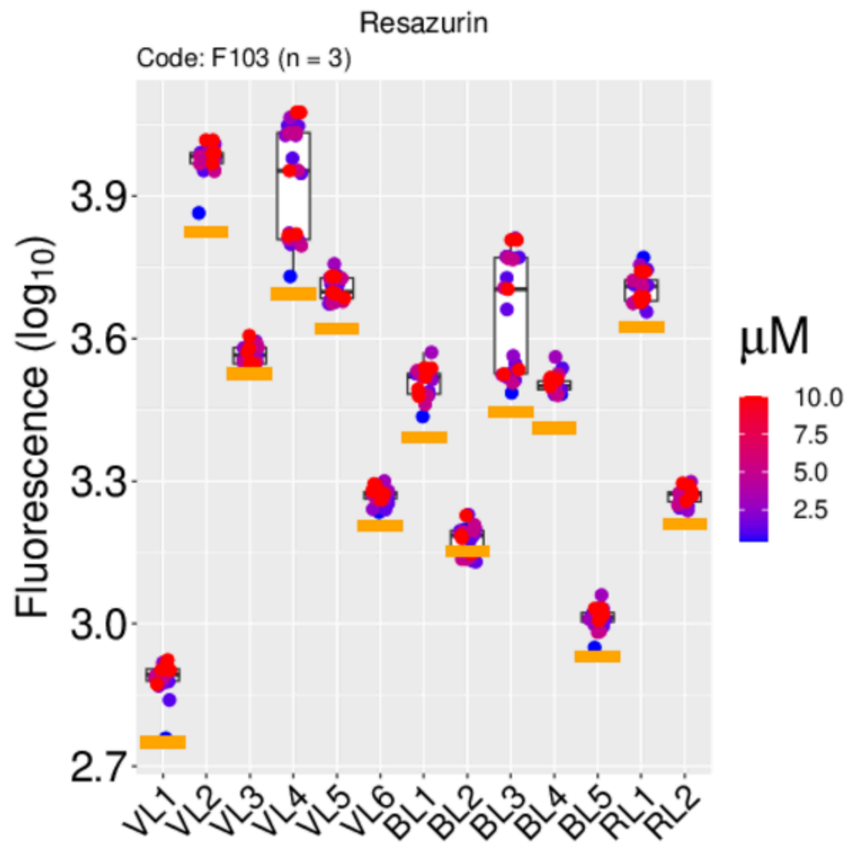

Quinacrine
Code: F101 (n = 3)
Fluorescence (log10)
3.8
3.4
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

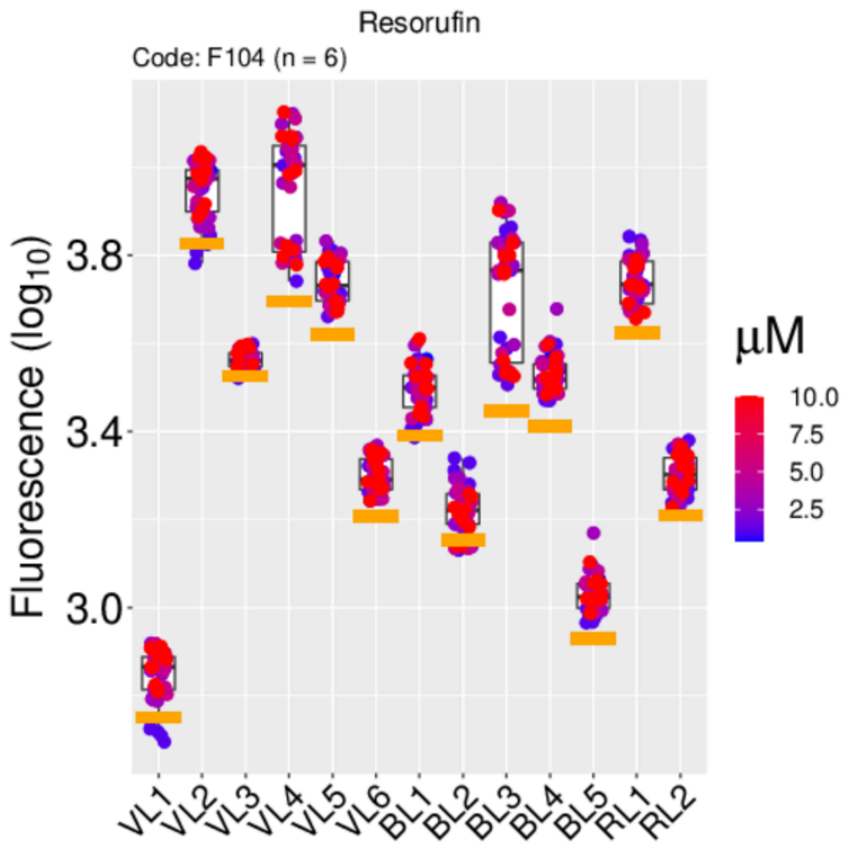

Quinine
Code: F102 (n = 3)
Fluorescence (log10)
3.9
3.6
3.3
3.0
2.7
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

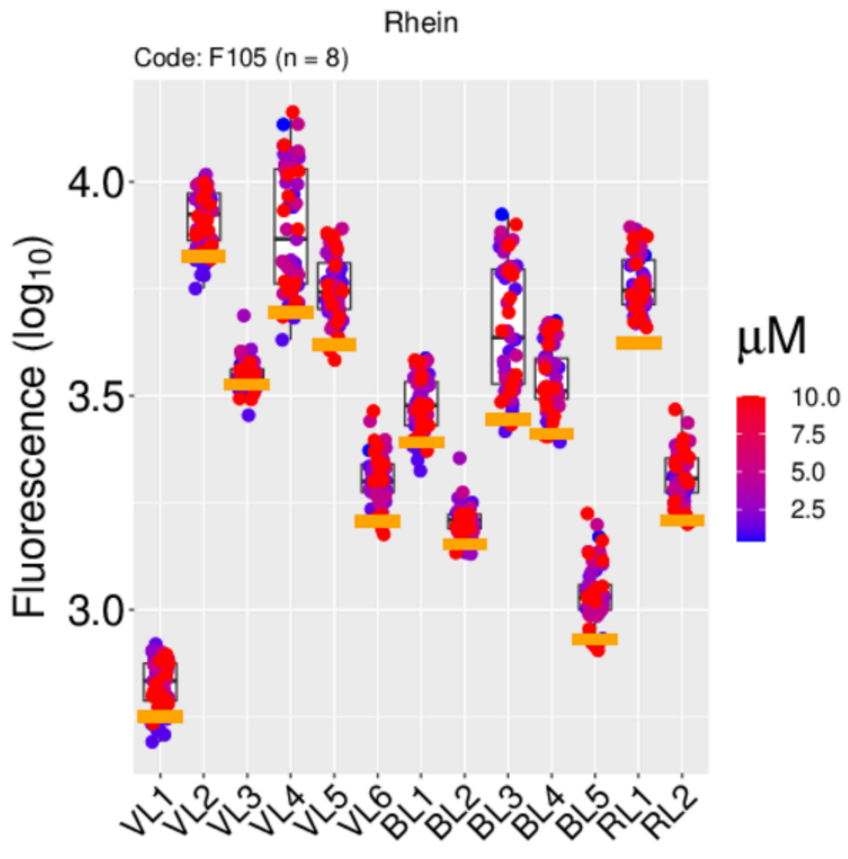

Quinizarin
Code: F164 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
2.5
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

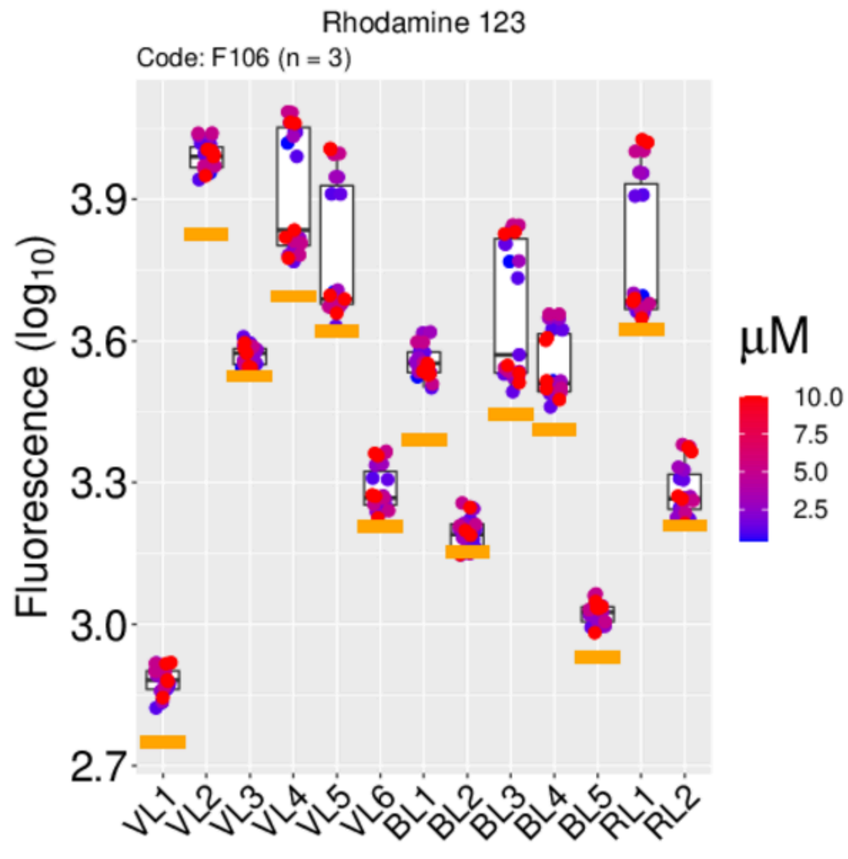

Radiant yellow
Code: F218 (n = 3)
Fluorescence (log10)
4.0
3.6
3.2
2.8
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Reichardt's Dye
Code: F193 (n = 3)
Fluorescence (log10)
4.0
3.5
3.0
2.5
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Resazurin
Code: F103 (n = 3)
Fluorescence (log10)
3.9
3.6
3.3
3.0
2.7
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Resorufin
Code: F104 (n = 6)
Fluorescence (log10)
3.8
3.4
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Rhein
Code: F105 (n = 8)
Fluorescence (log10)
4.0
3.5
3.0
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5


Rhodamine 123
Code: F106 (n = 3)
Fluorescence (log10)
3.9
3.6
3.3
3.0
2.7
VL1 VL2 VL3 VL4 VL5 VL6 BL1 BL2 BL3 BL4 BL5 RL1 RL2
μM
10.0
7.5
5.0
2.5

Rhodamine 6G
Code: F107 (n = 3)

Rhodamine 700
Code: F210 (n = 8)

Rhodamine 800
Code: F211 (n = 6)

Rhodamine B
Code: F108 (n = 8)

Riboflavin
Code: F109 (n = 8)

Safranine O
Code: F110 (n = 8)

Sanguinarine
Code: F111 (n = 3)

Sennoside A
Code: F112 (n = 6)

Sudan II
Code: F168 (n = 6)

Sudan IV
Code: F114 (n = 6)

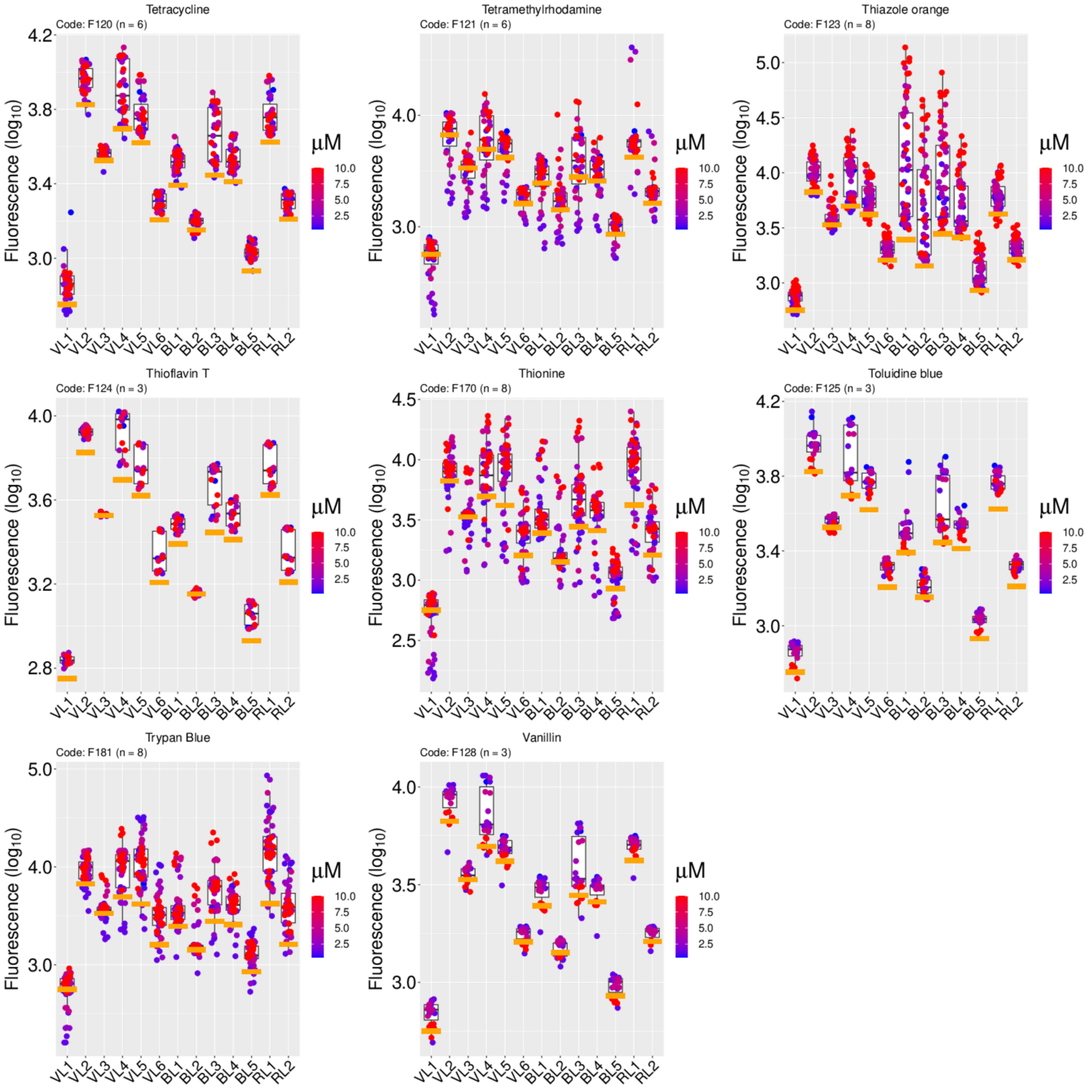
Sulphorhodamine B
Code: F115 (n = 8)

Sunset Yellow
Code: F116 (n = 3)

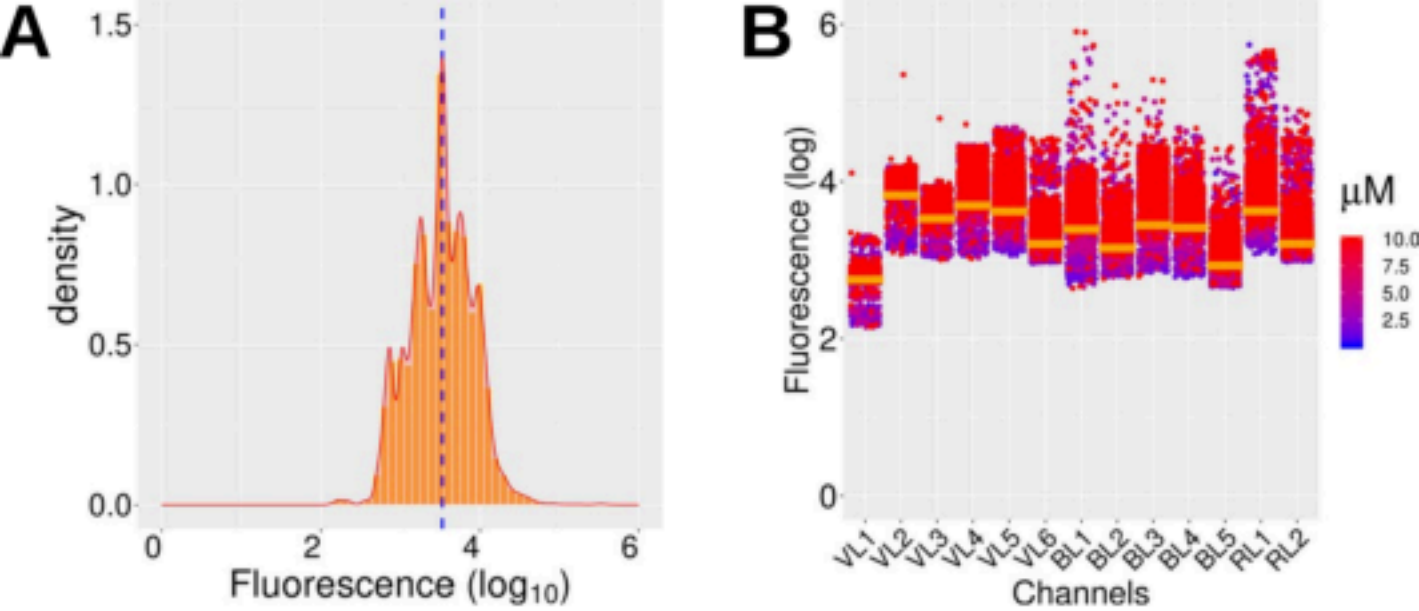
SYBR Green I
Code: F117 (n = 8)

SYTO13
Code: F220 (n = 5)

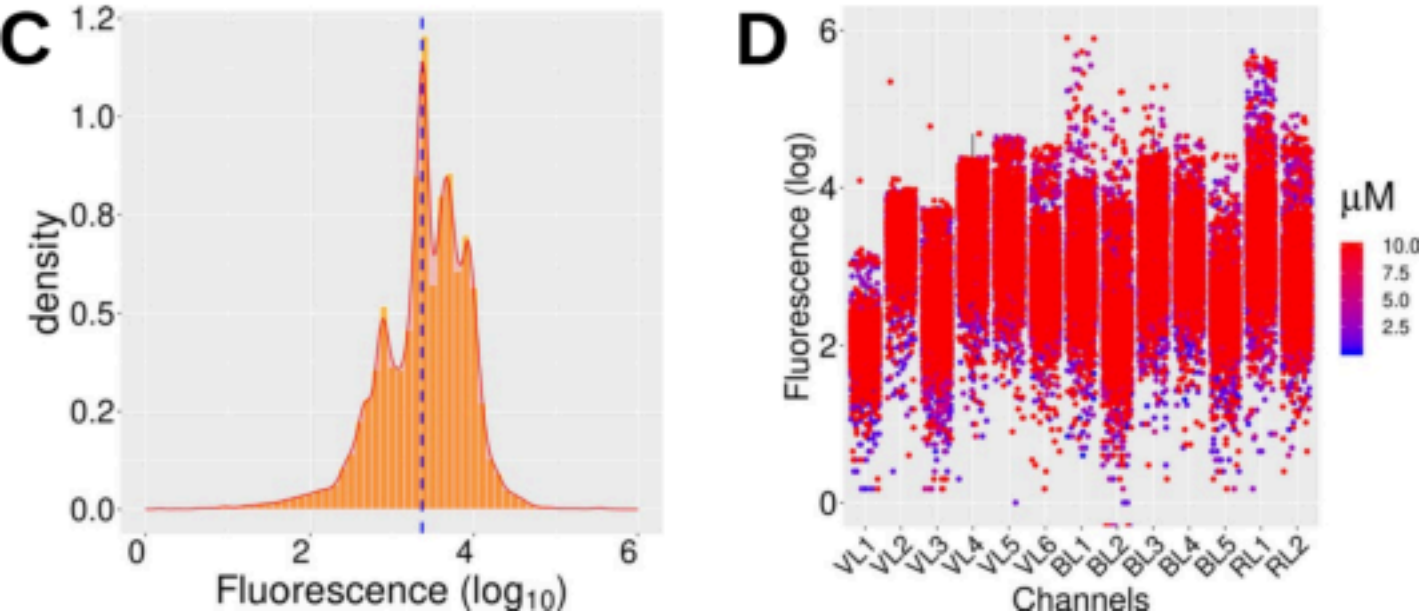
Tartrazine
Code: F119 (n = 6)



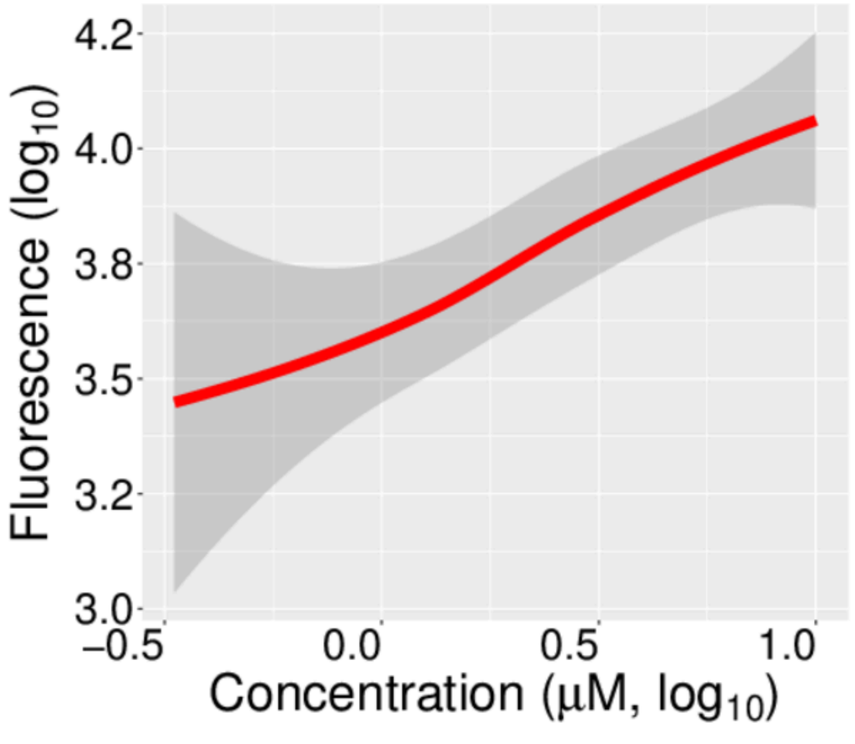
Supplementary Figure 1



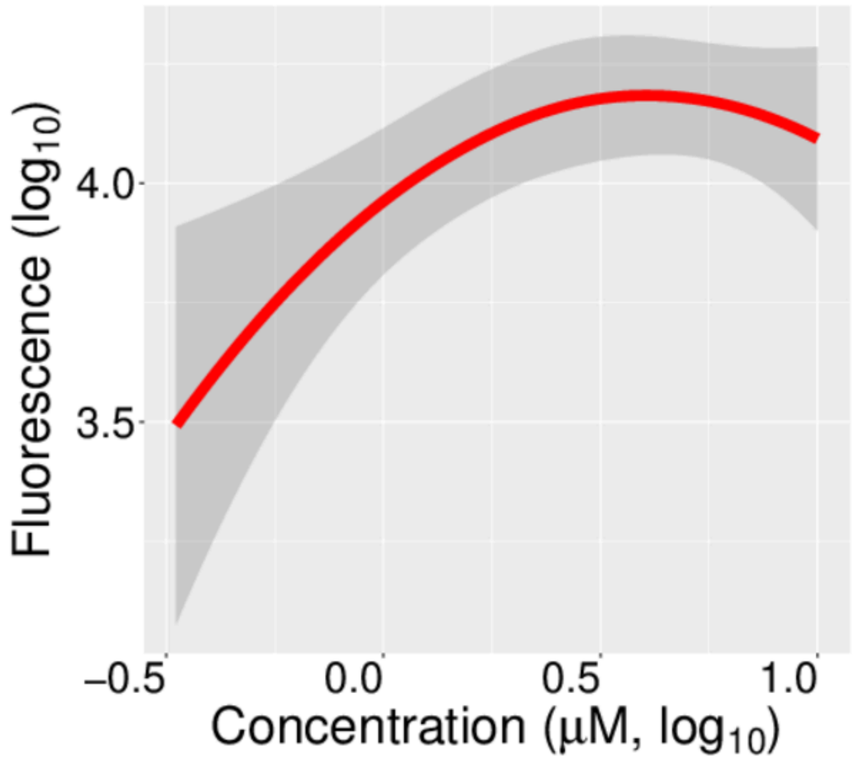
Supplementary Figure 2



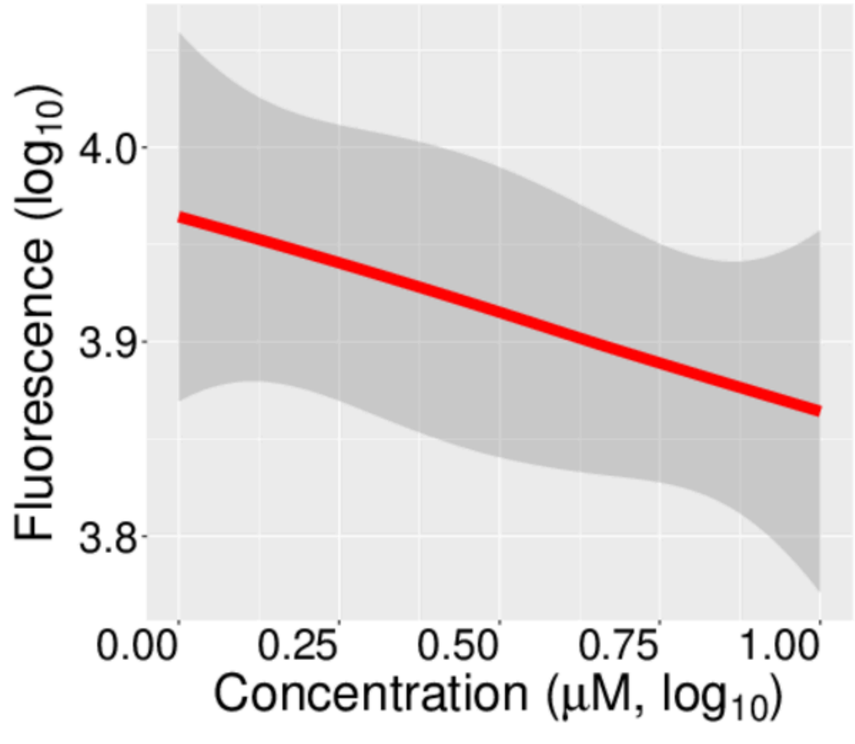
2-(N-(7-Nitrobenz-2-oxa-1v,3-diazol-4-yl)Amino)-2-Deoxyglucose
Channel: BL3 Code: F1



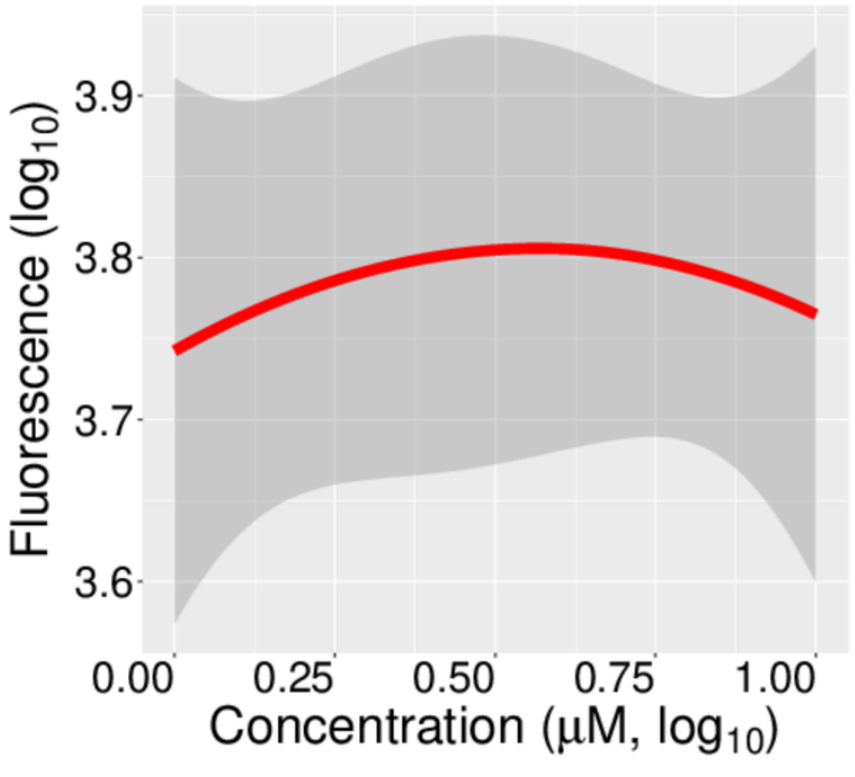
2',7'-Dichlorofluorescein
Channel: BL3 Code: F2



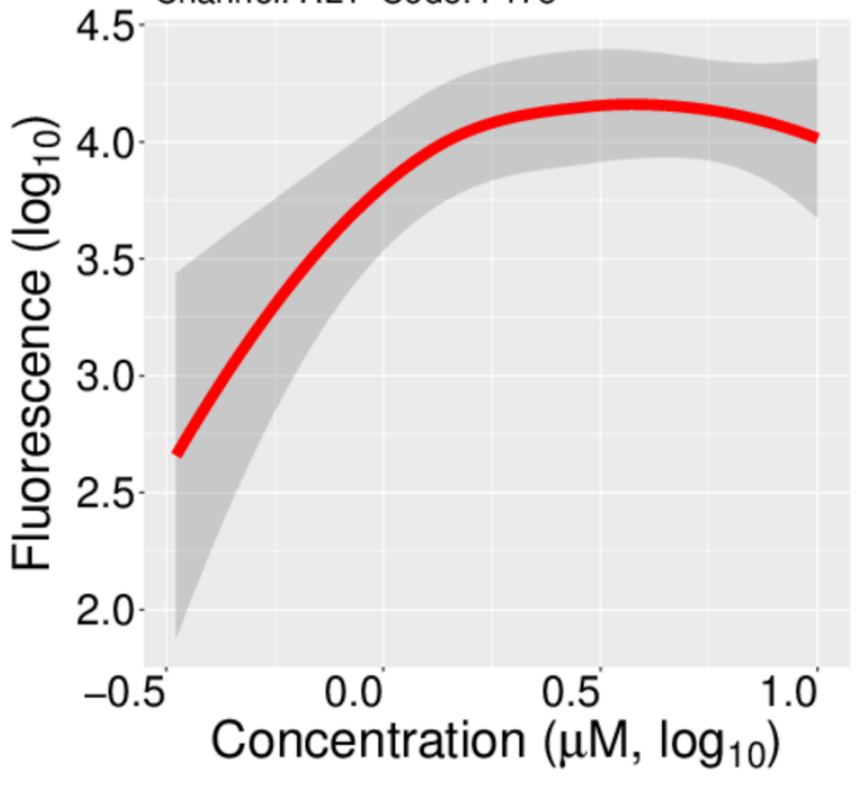
3,6-Bis(4-chlorophenyl)-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione
Channel: RL1 Code: F222



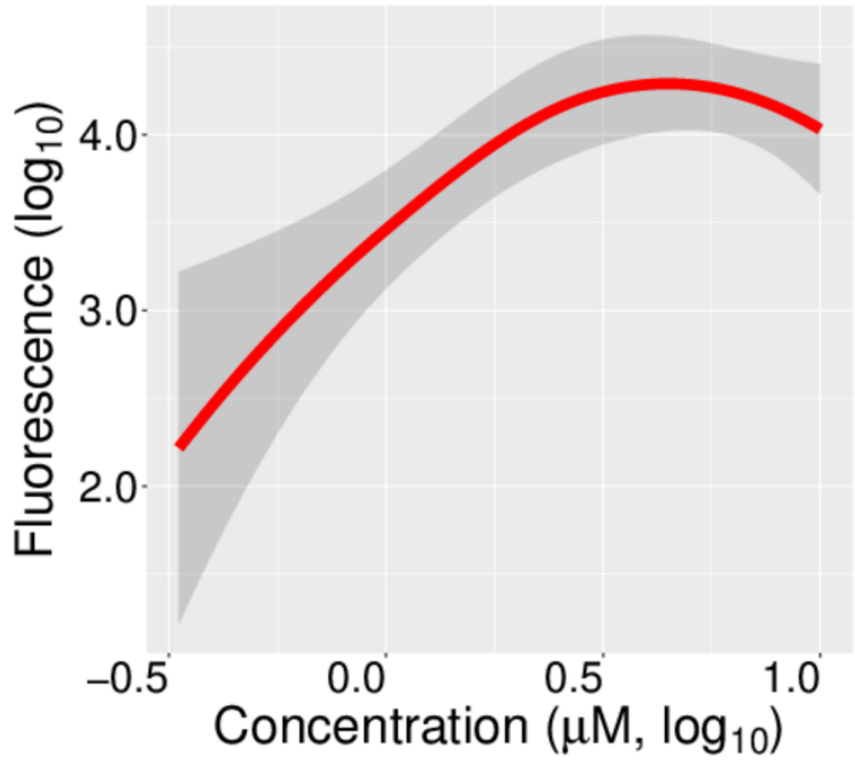
3,6-Diphenyl-2,5-dihydropyrrolo[3,4-c]pyrrole-1,4-dione
Channel: RL1 Code: F221



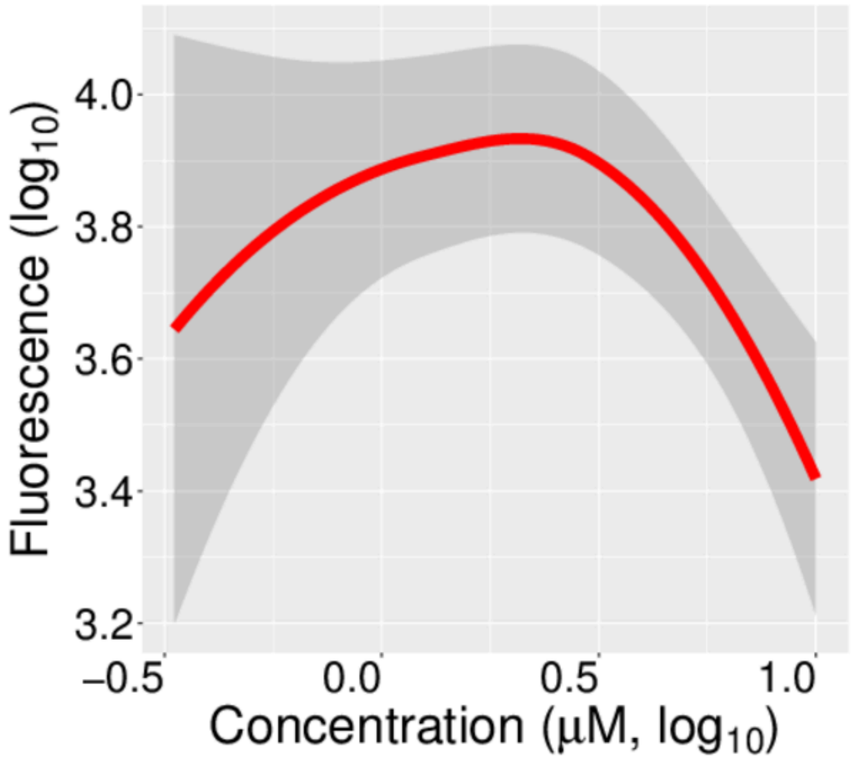
4-(4-(Dimethylamino)styryl-N-methylpyridinium (ASP+)-
Channel: RL1 Code: F175



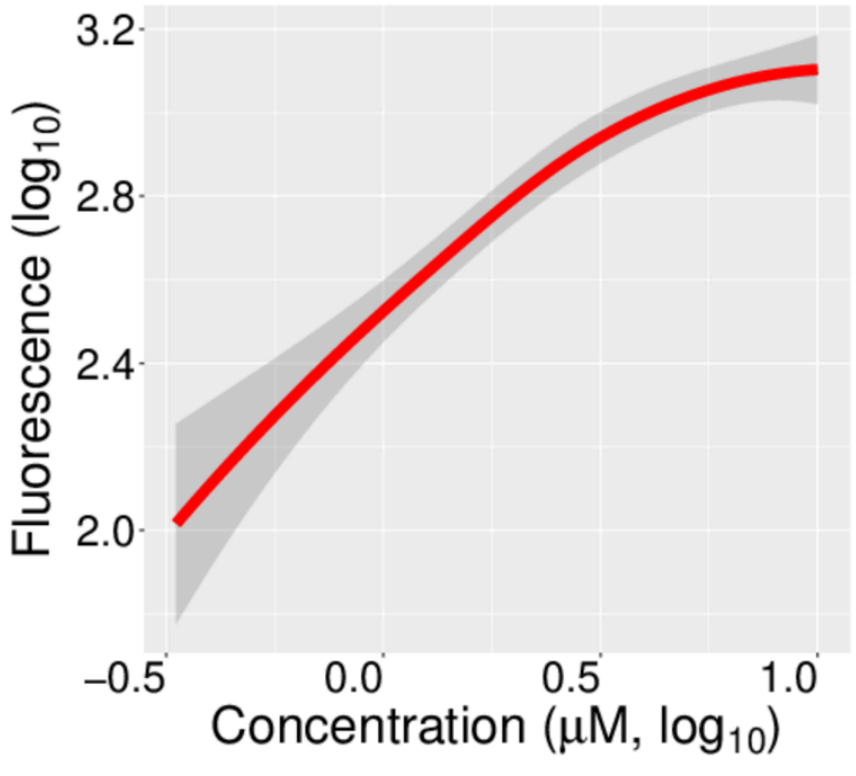
5-Carboxyfluorescein
Channel: BL3 Code: F192



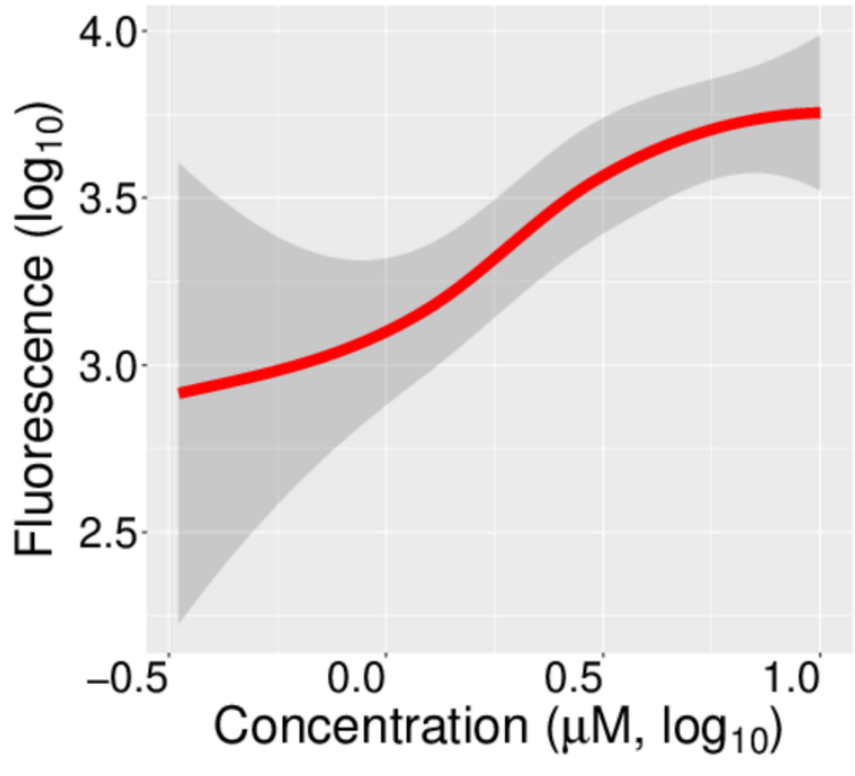
7-Aminoactinomycin D
Channel: VL4 Code: F4



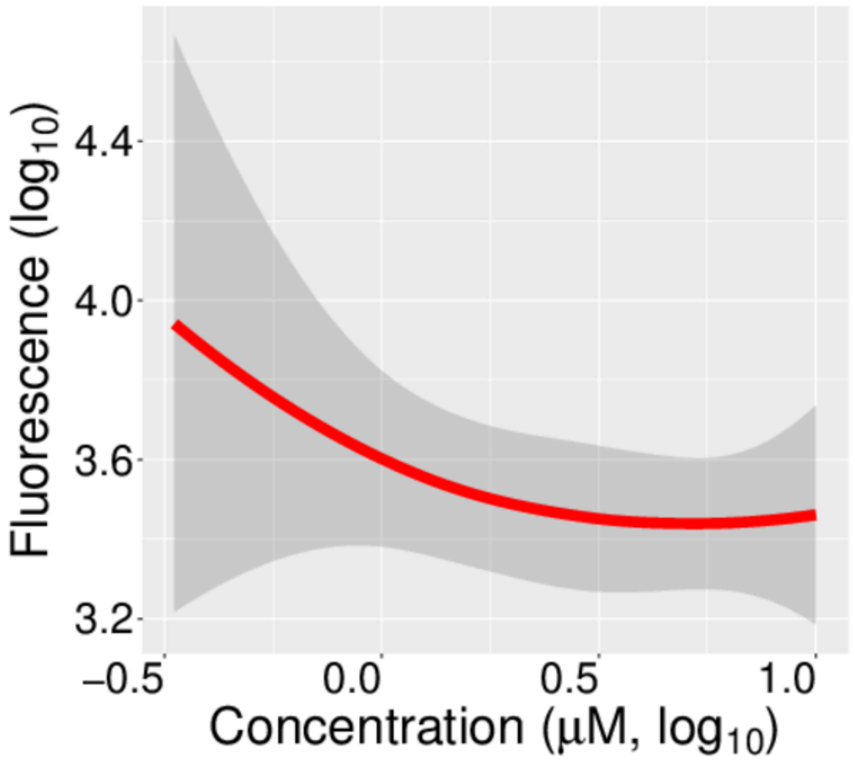
9-Aminoacridine
Channel: VL1 Code: F6



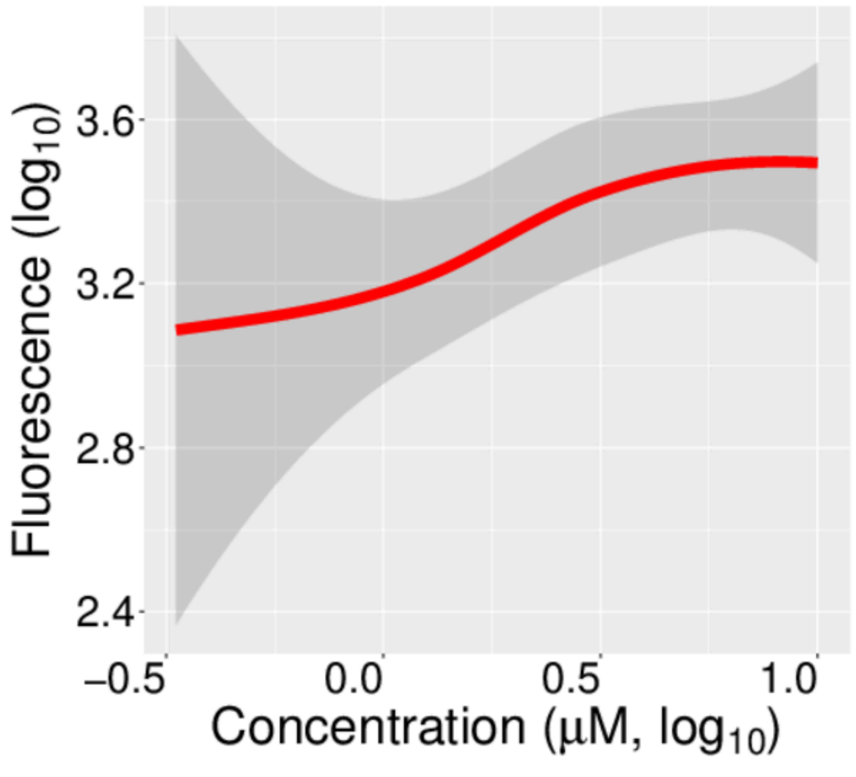
Acridine orange
Channel: BL3 Code: F7



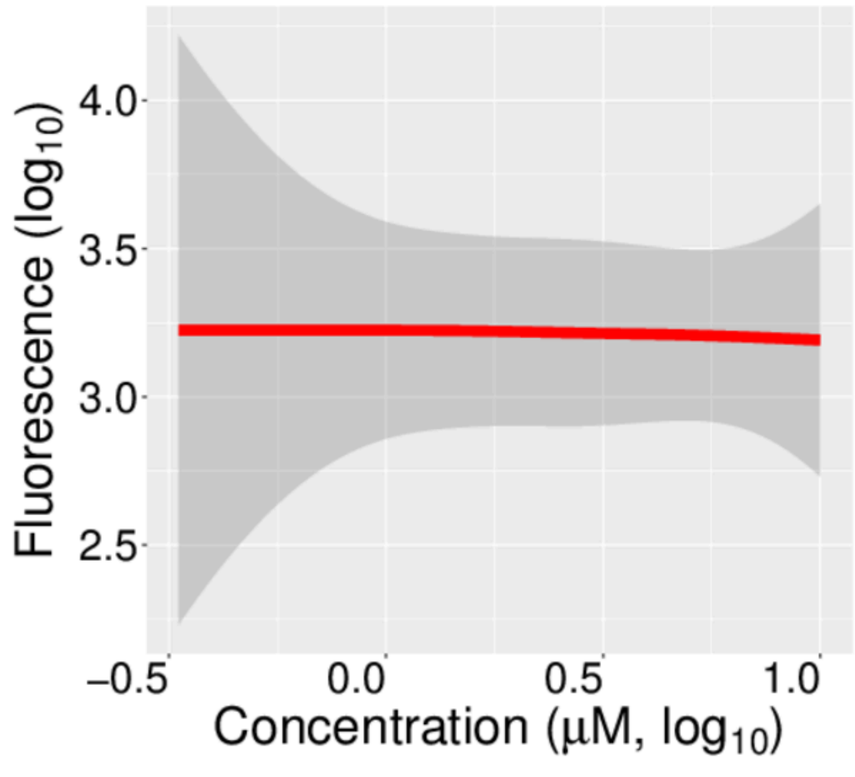
Alizarin
Channel: BL3 Code: F10



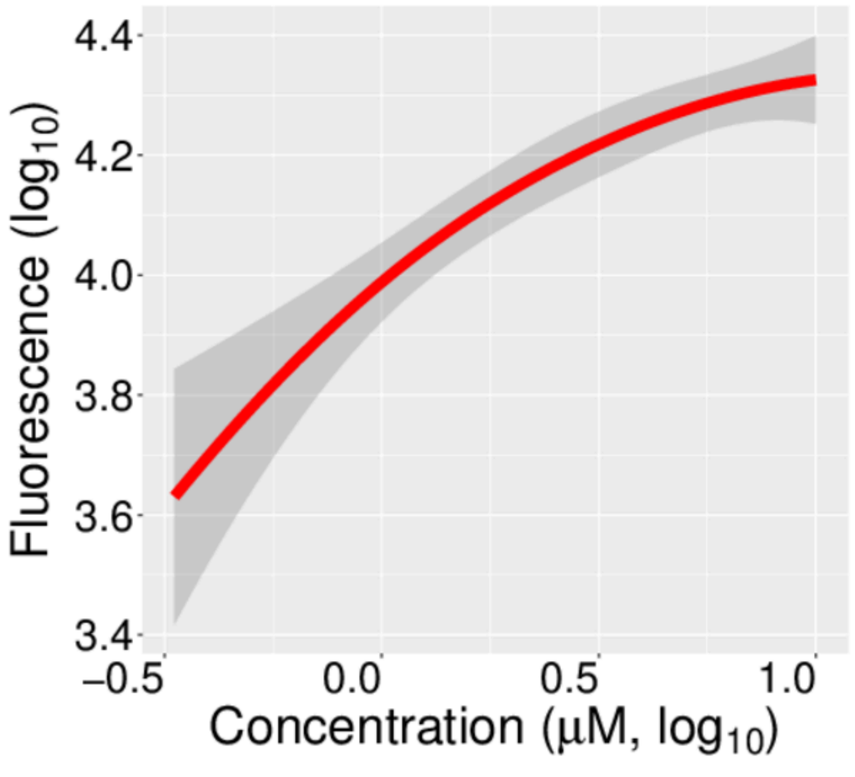
Amaranth
Channel: BL3 Code: F12



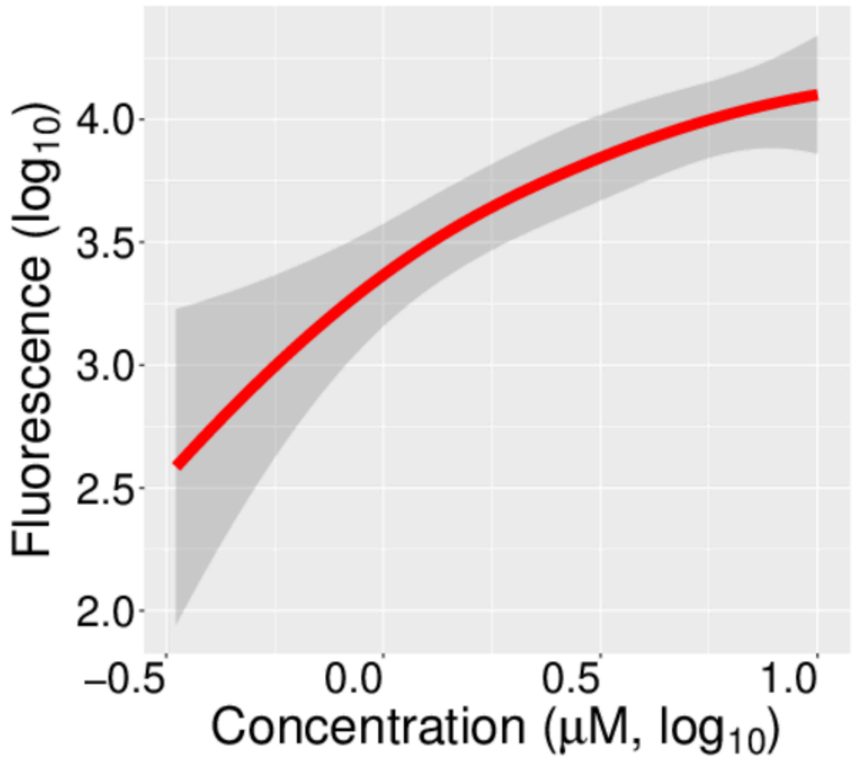
ATTO 430LS carboxy
Channel: BL3 Code: F136



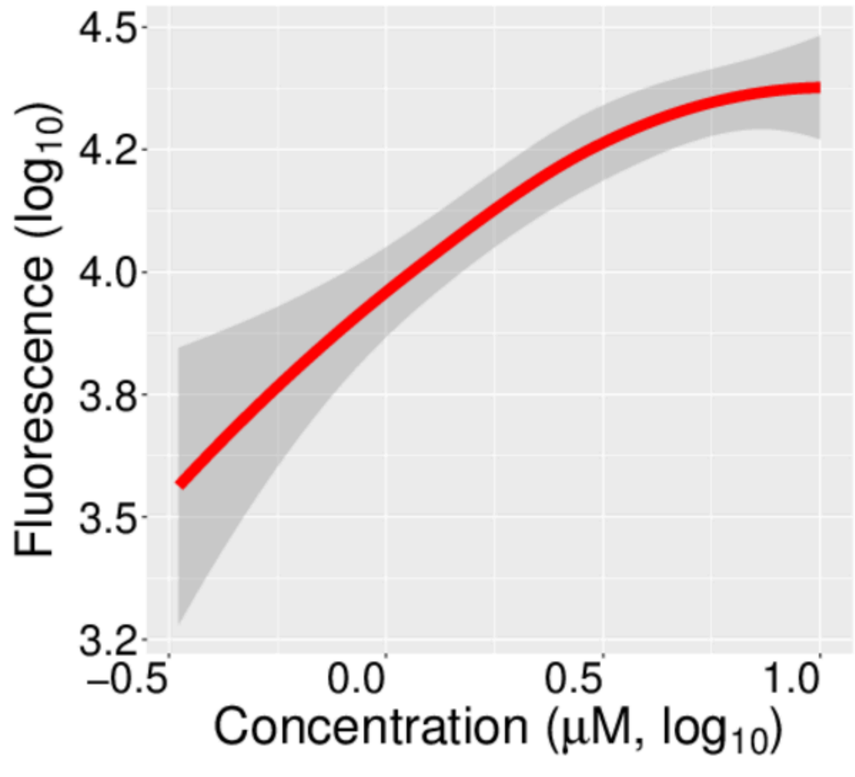
ATTO 488 carboxy
Channel: BL3 Code: F132



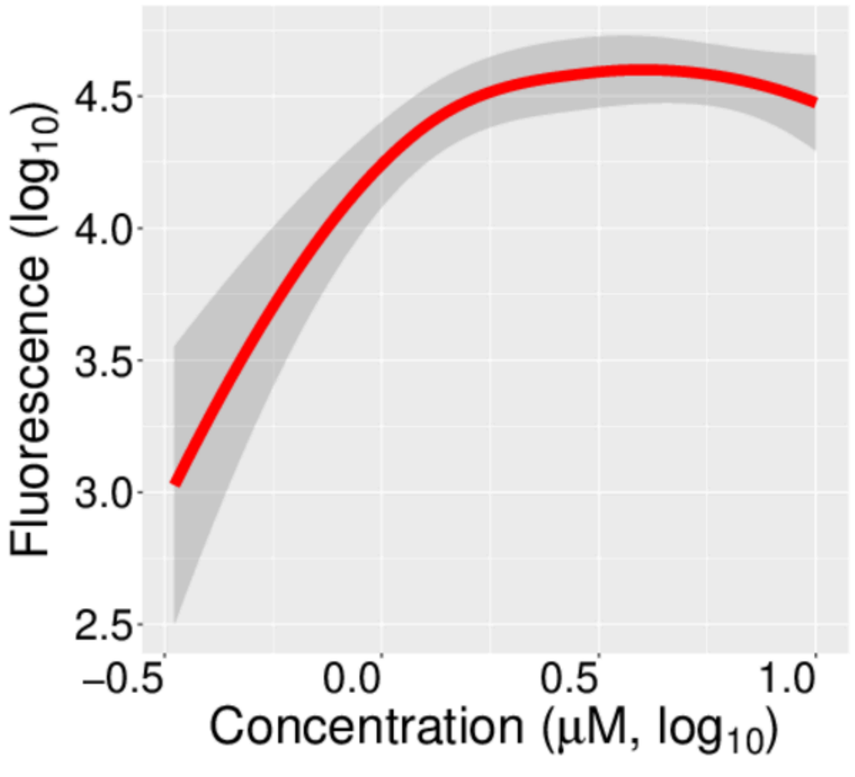
ATTO 490LS carboxy
Channel: BL5 Code: F137



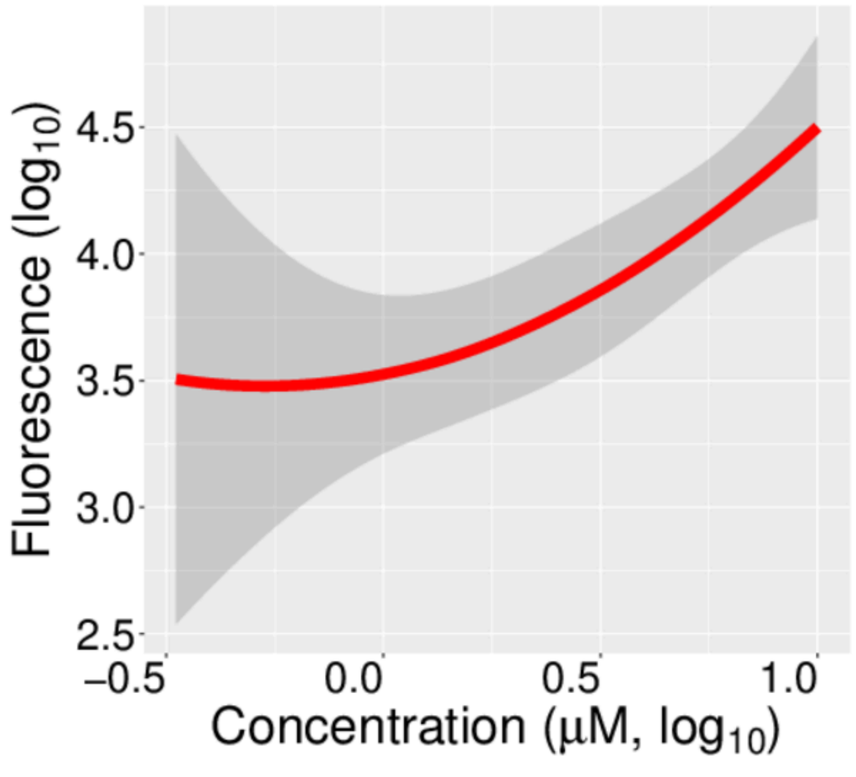
ATTO 633 carboxy
Channel: RL2 Code: F134



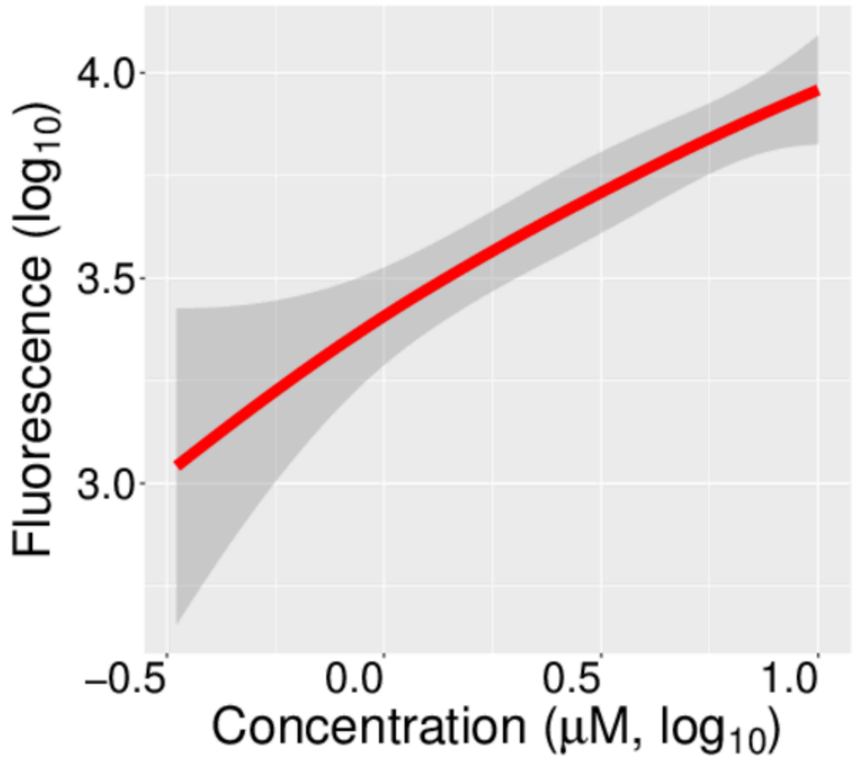
ATTO 647 carboxy
Channel: RL1 Code: F135



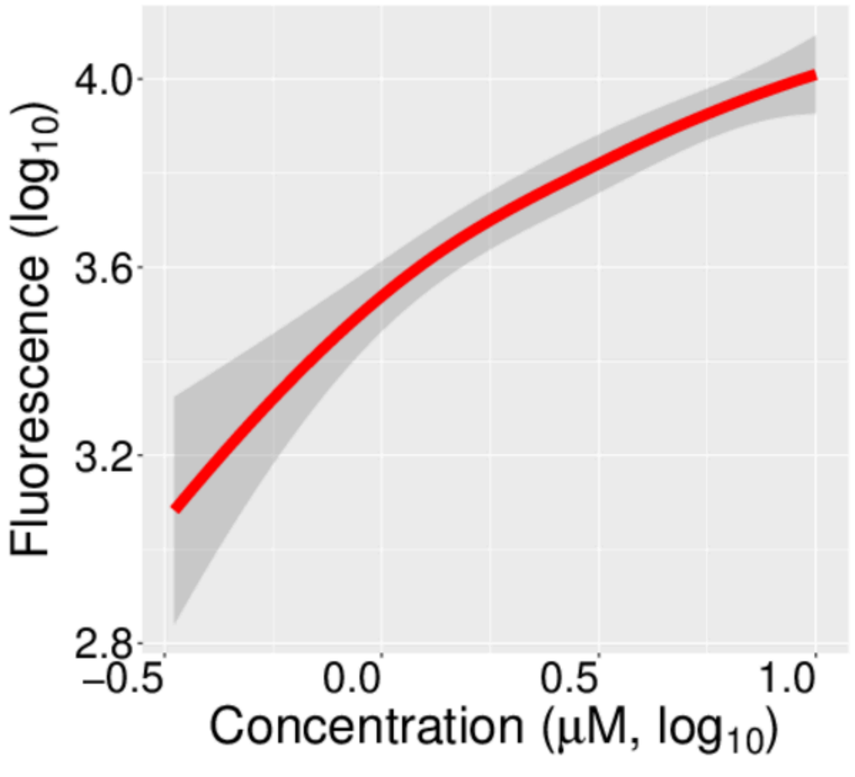
ATTO Rho14 carboxy
Channel: RL1 Code: F133



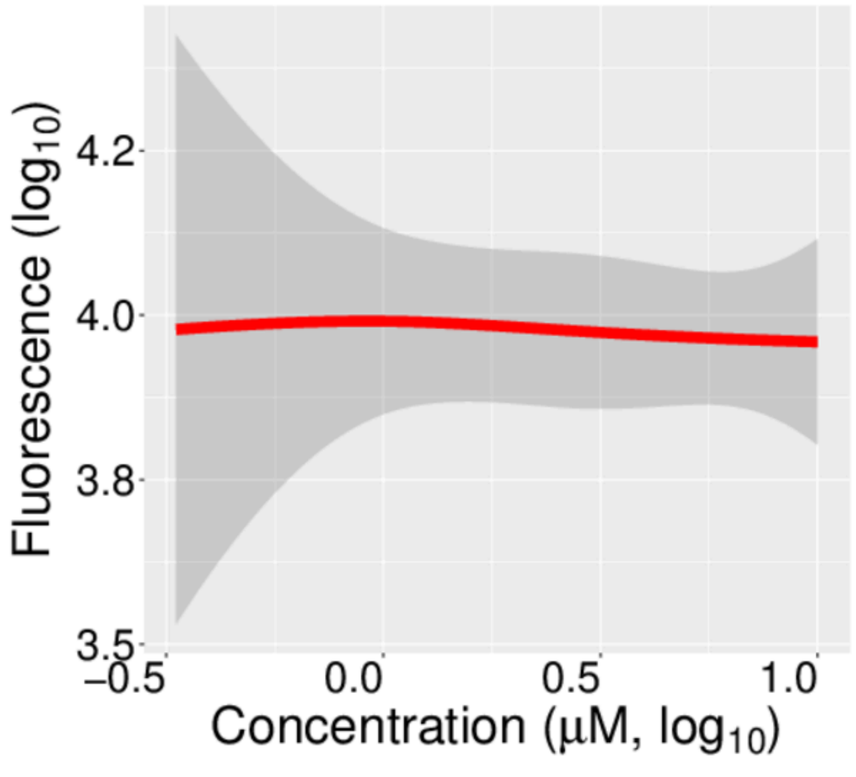
Azure A
Channel: RL1 Code: F15



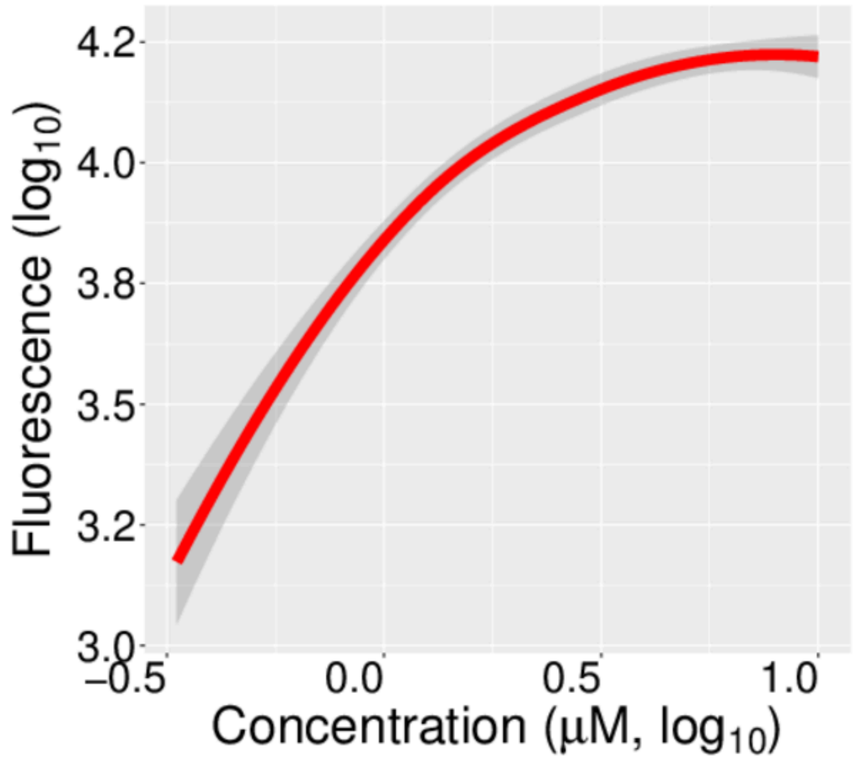
Azure B
Channel: RL1 Code: F16



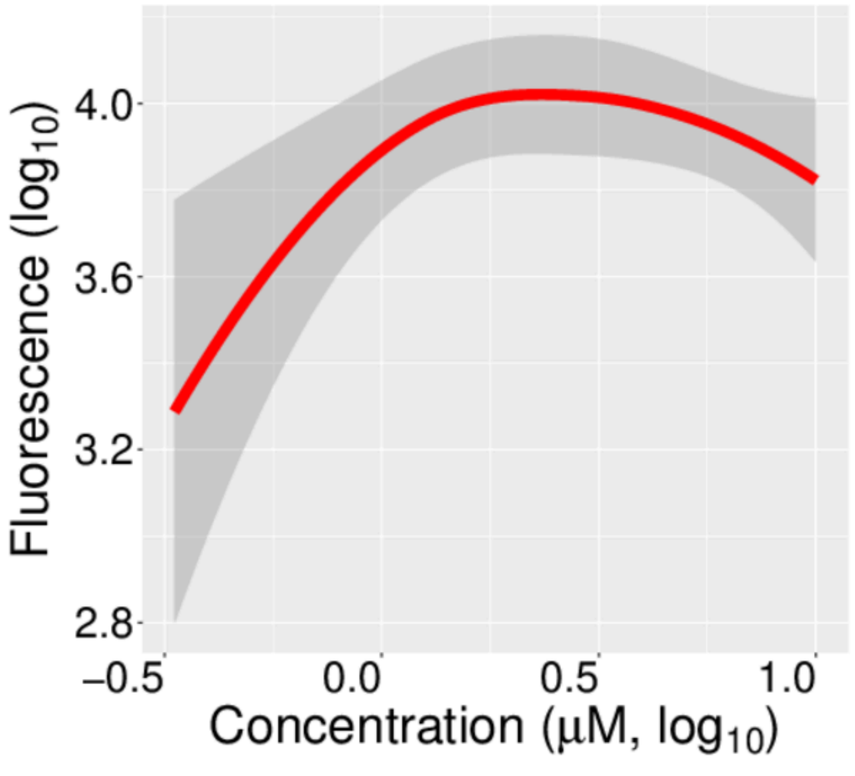
Azure C
Channel: RL1 Code: F139



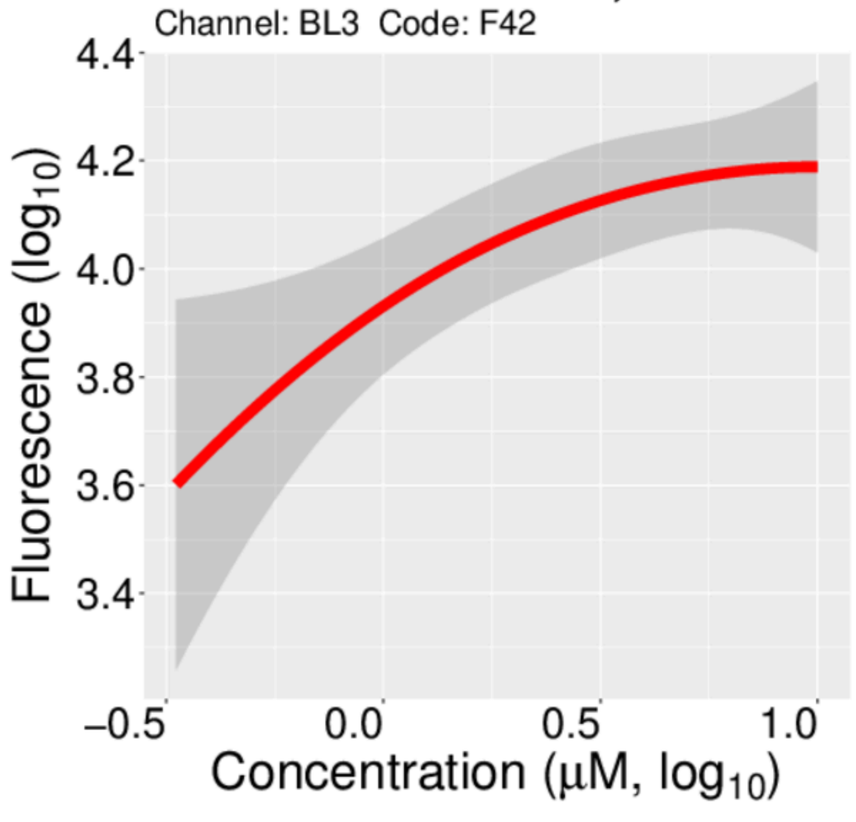
Calcein
Channel: BL3 Code: F27



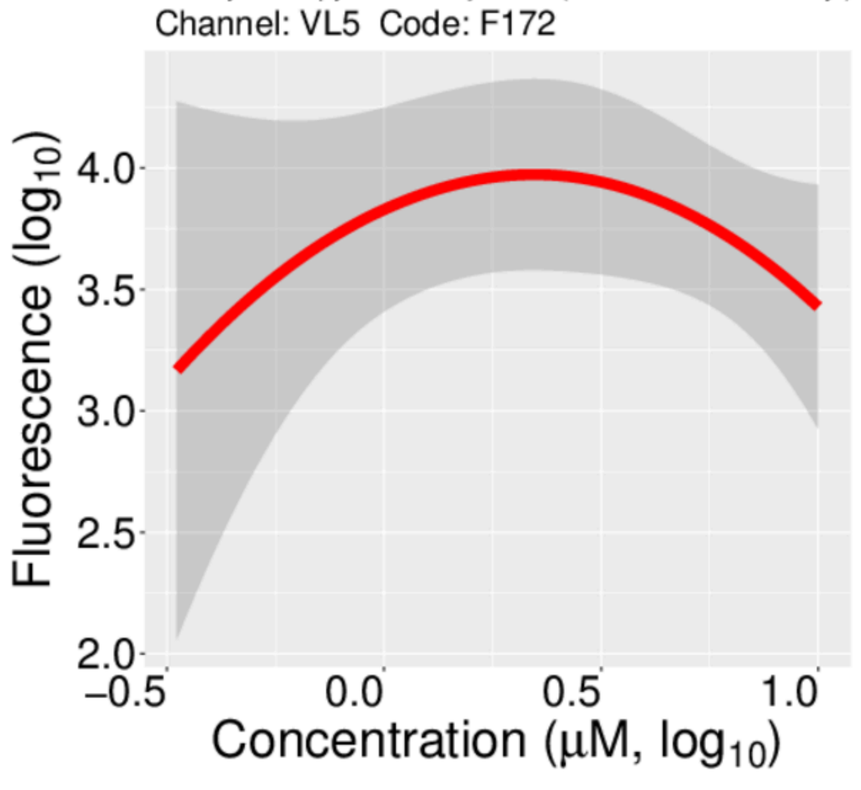
Celestine blue
Channel: RL1 Code: F198



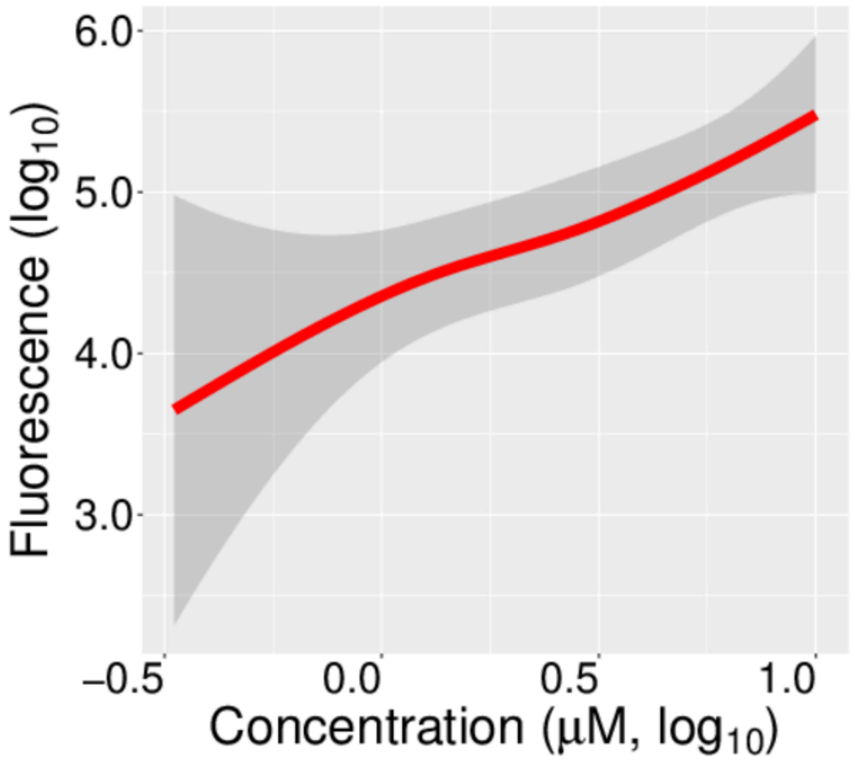
CruzFluor 405 succinimidyl ester
Channel: BL3 Code: F42



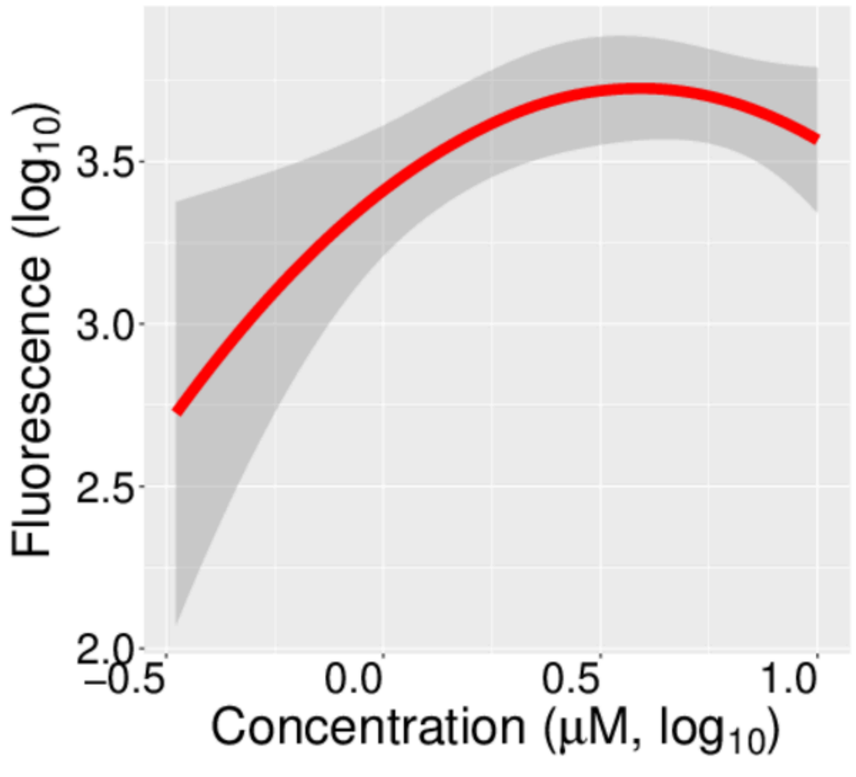
Difluoro{2–[(3,5–dimethyl–2H–pyrrol–2–ylidene–N)methyl]–
dimethyl–1H–pyrrolato–N}boron (BODIPY tetra–methyl)
Channel: VL5 Code: F172



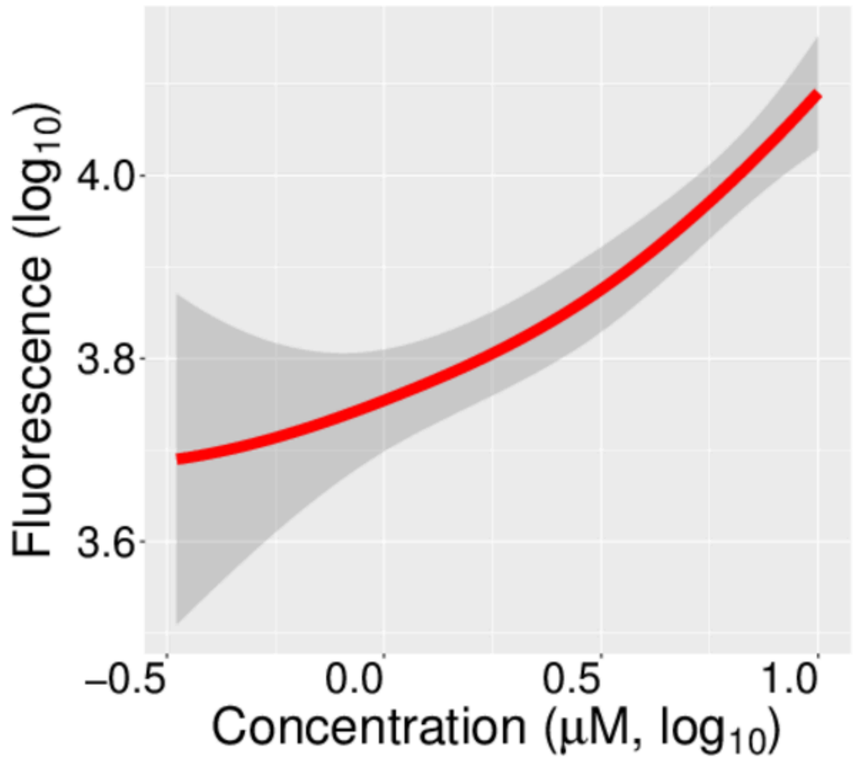
DiSC3(5)
Channel: RL1 Code: F54



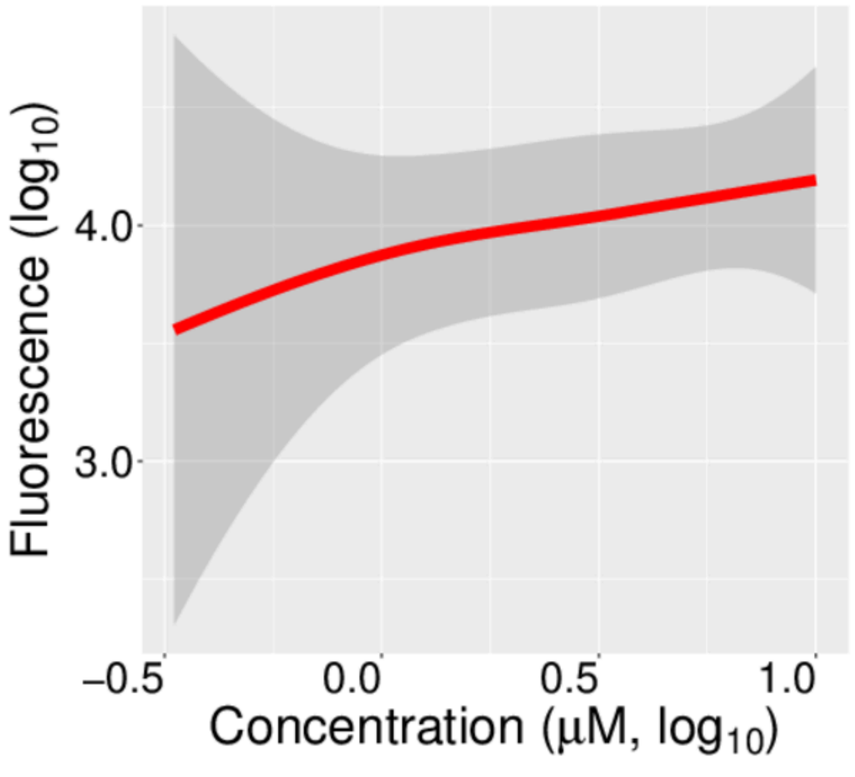
Doxorubicin
Channel: BL3 Code: F129



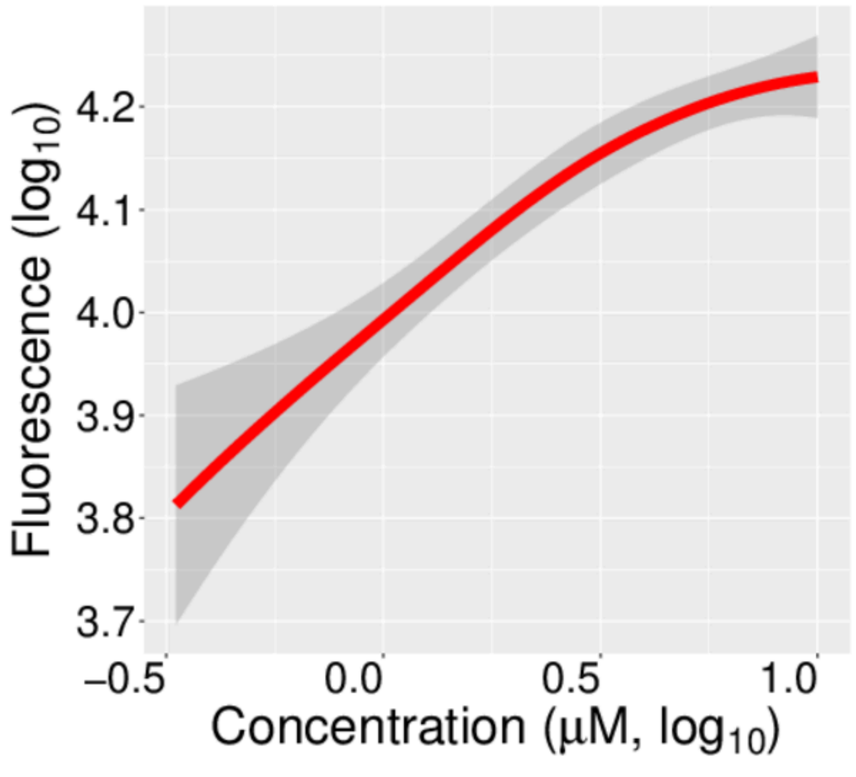
Ethidium bromide
Channel: BL3 Code: F60



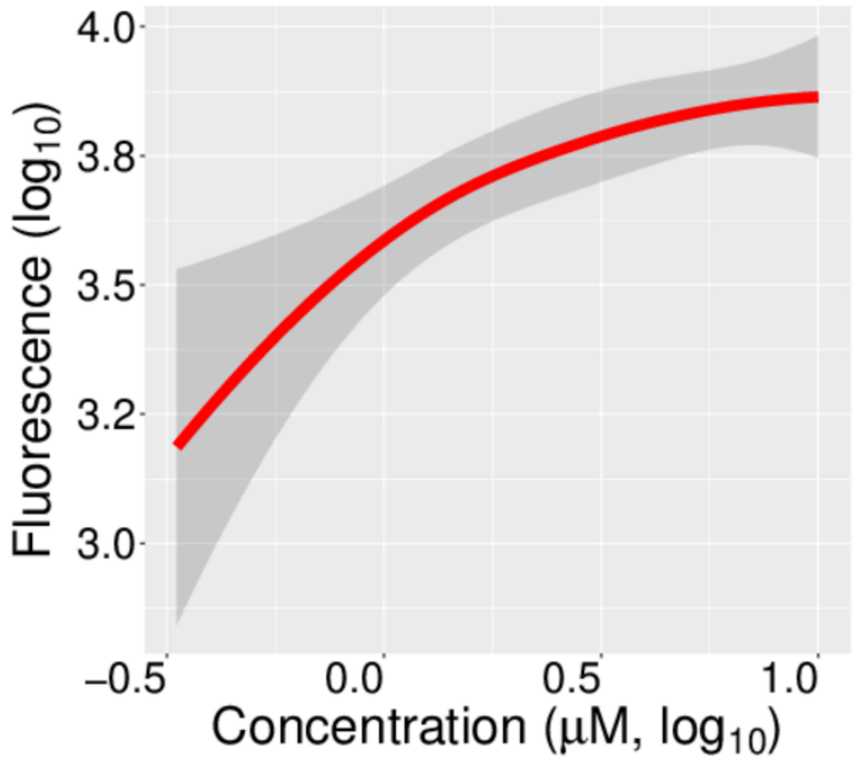
Ethyl Red
Channel: RL1 Code: F212



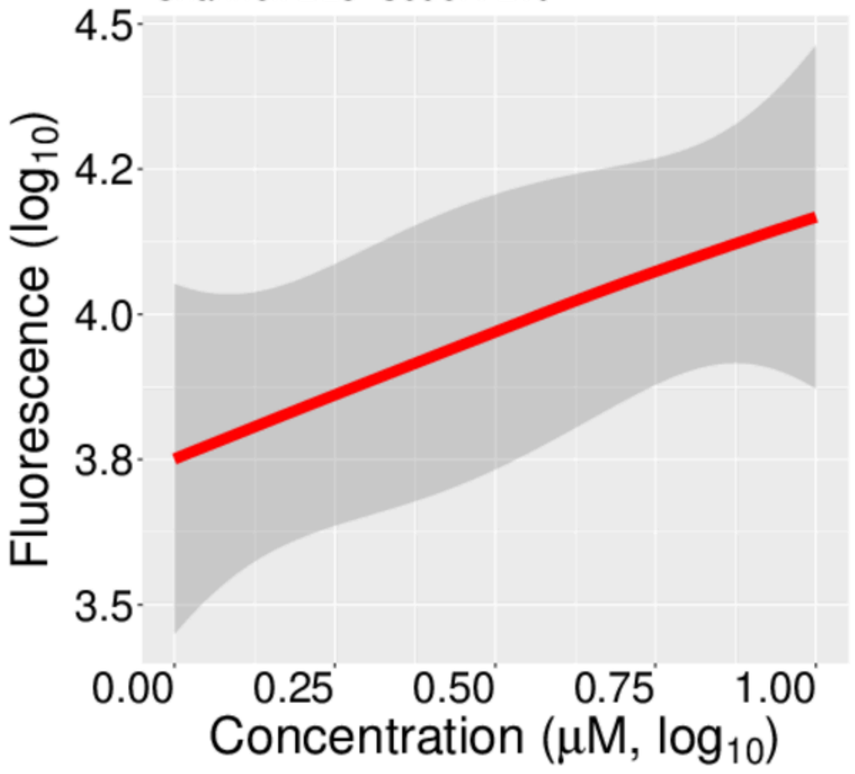
Fluorescein
Channel: BL3 Code: F62



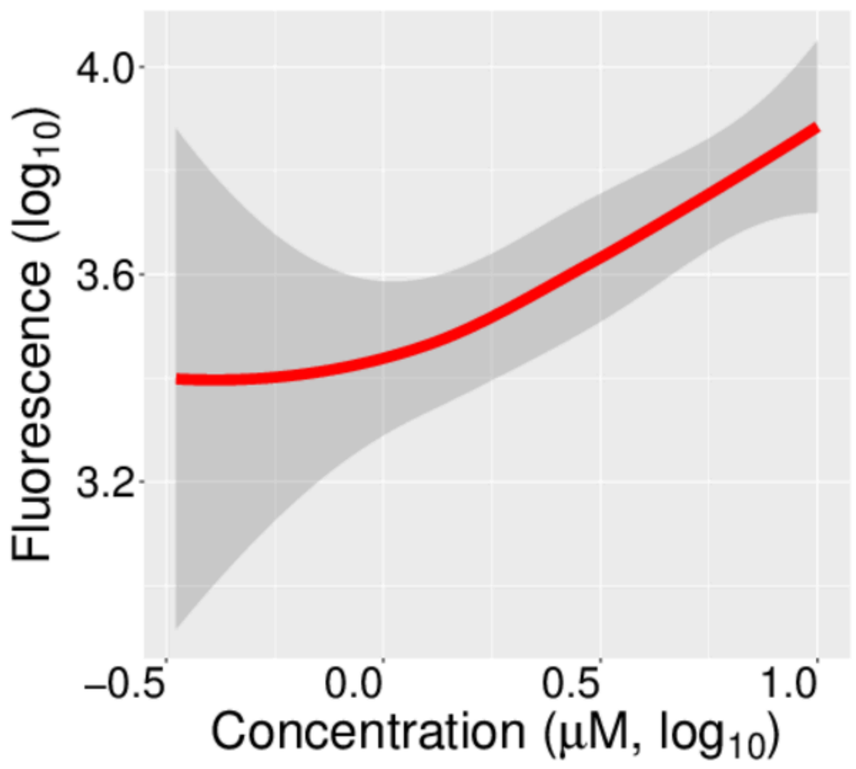
H2FDA
Channel: BL1 Code: F65



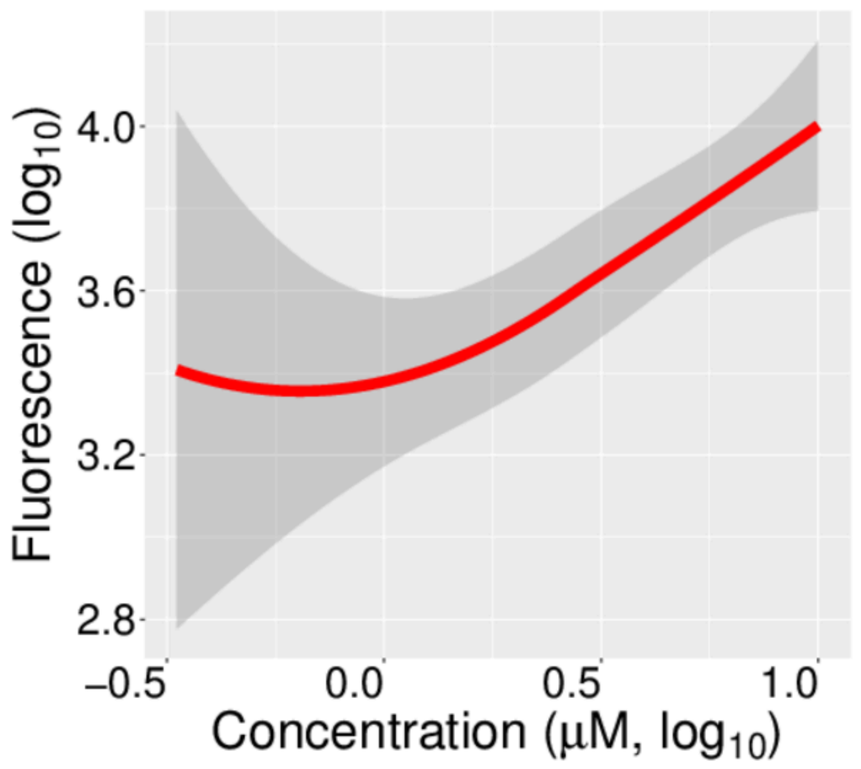
Hexidium iodide
Channel: BL3 Code: F219



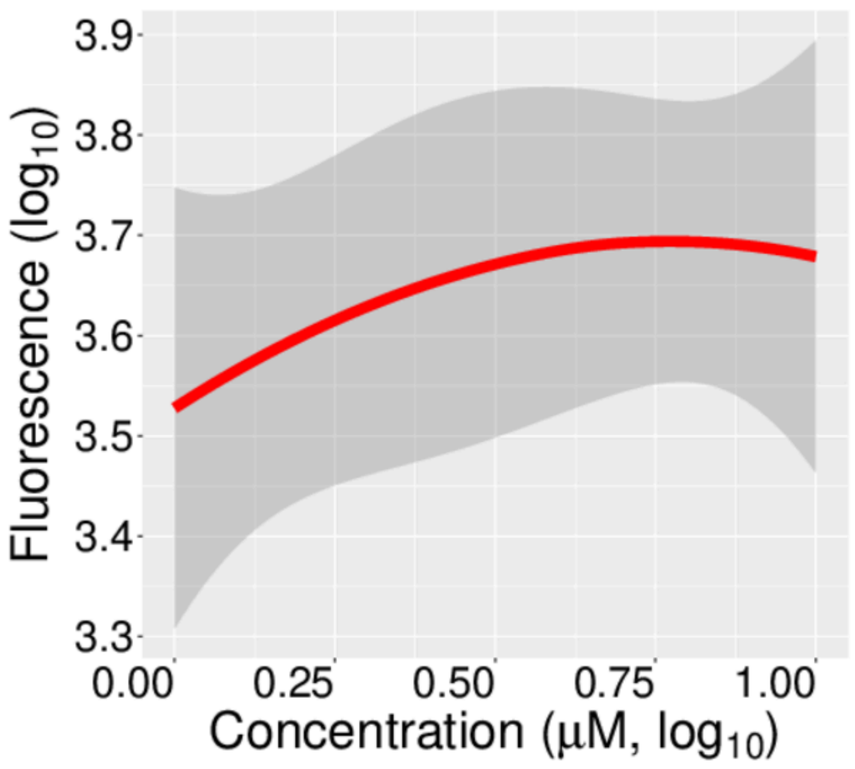
Methylene blue
Channel: RL1 Code: F77



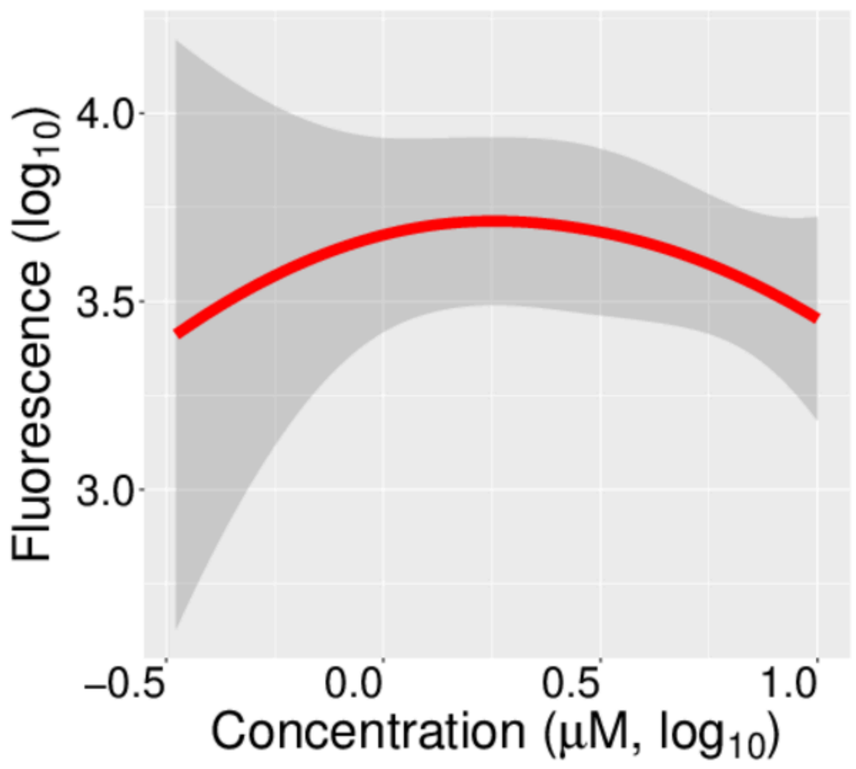
Mithramycin A
Channel: VL4 Code: F80



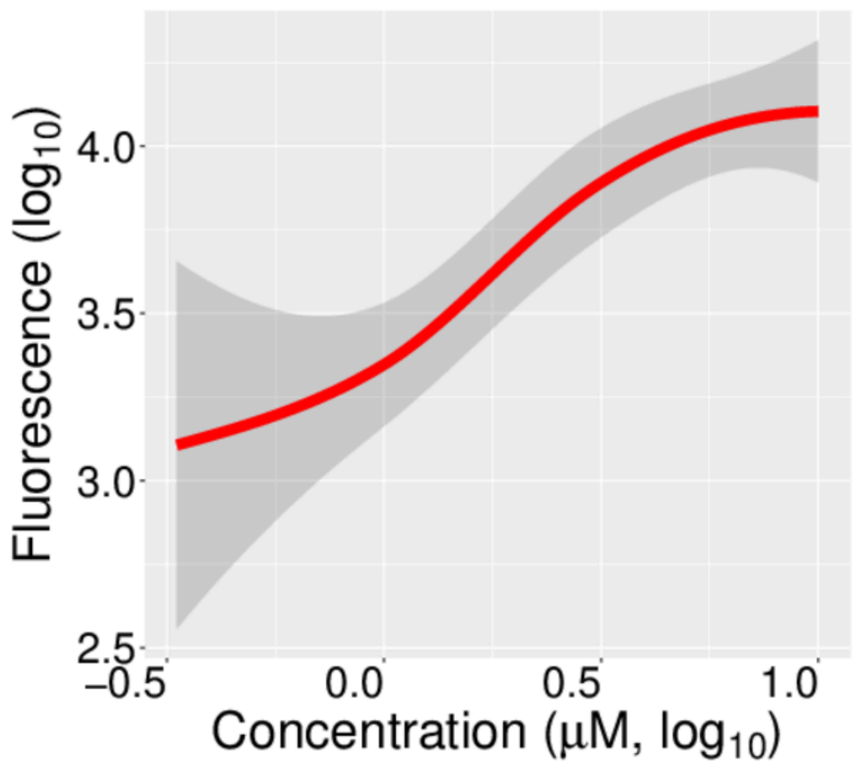
Morin
Channel: BL3 Code: F158



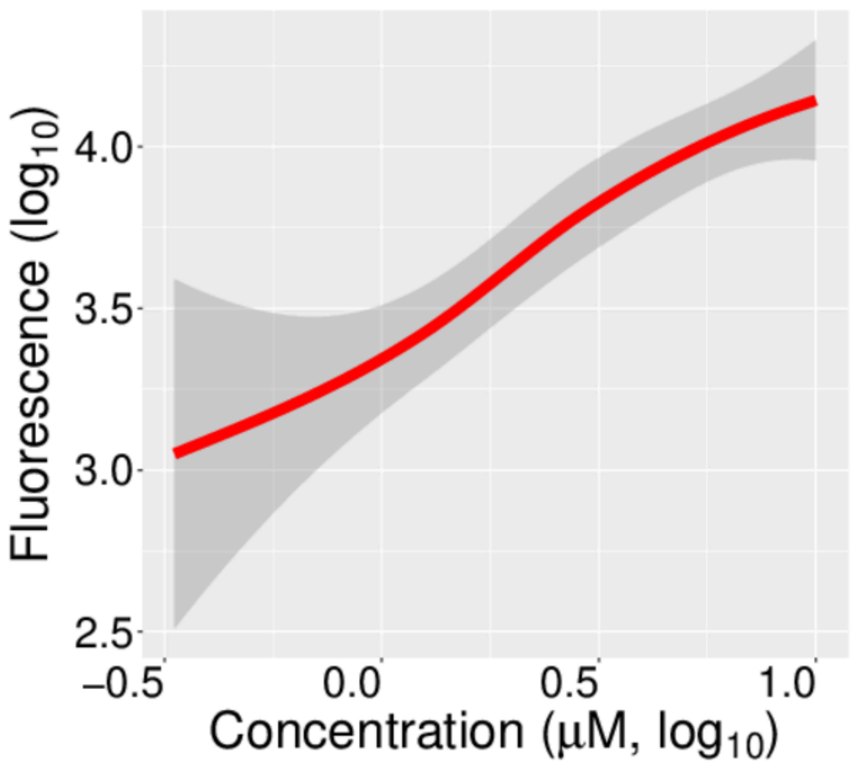
Oxazine 170
Channel: RL1 Code: F191



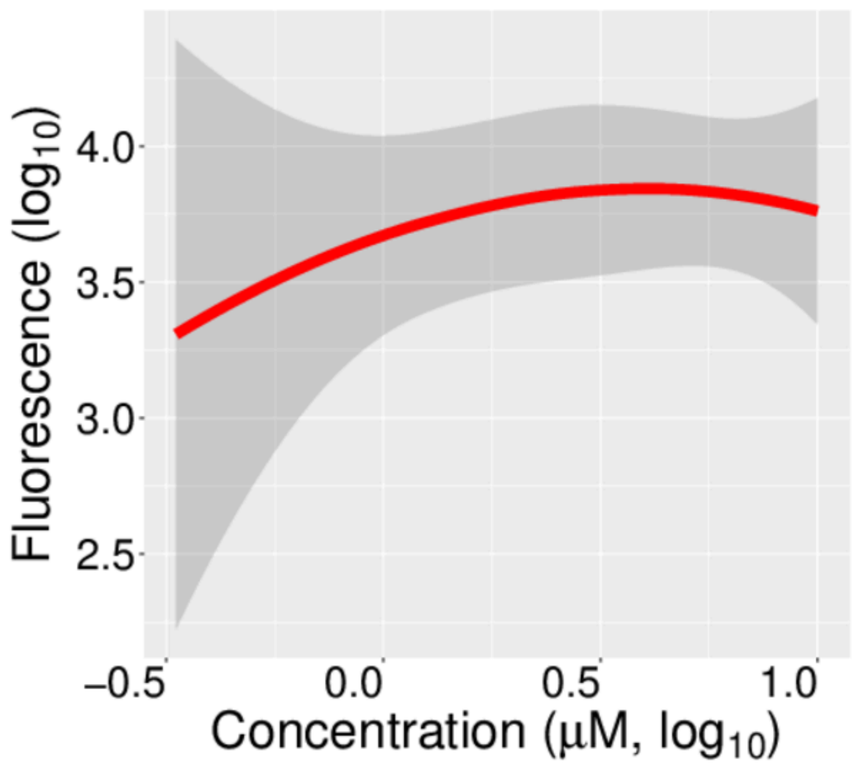
Pyranine
Channel: VL4 Code: F163



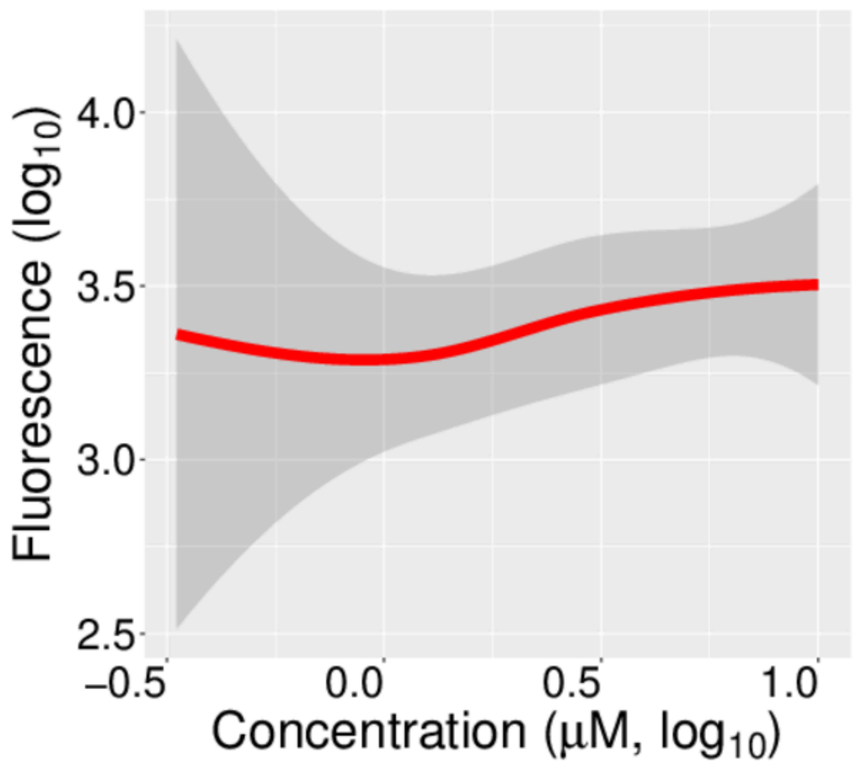
Pyronin Y
Channel: BL3 Code: F99



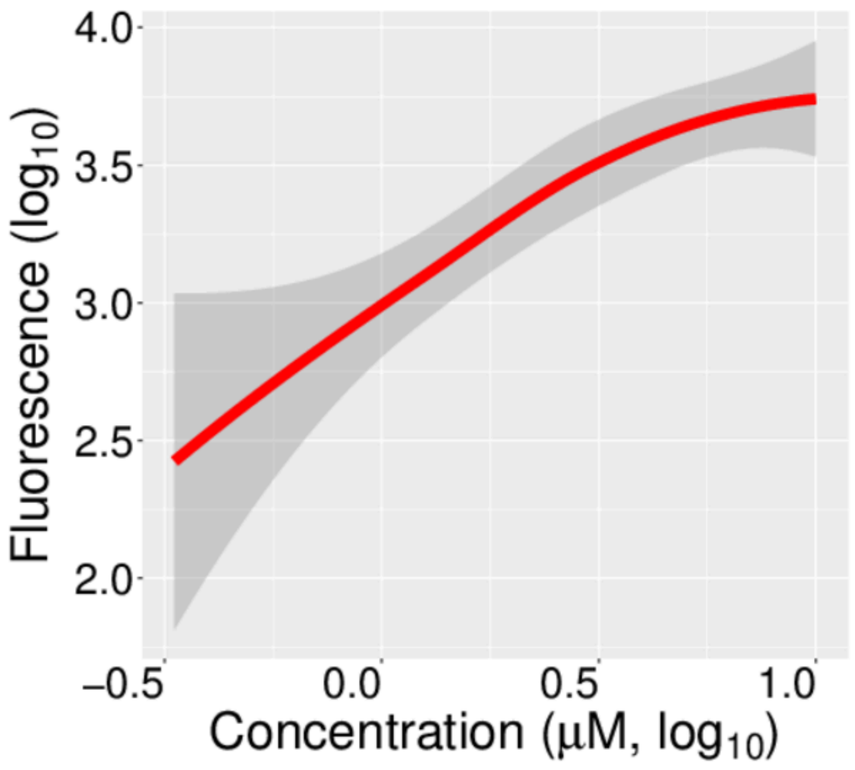
Rhodamine 800
Channel: RL2 Code: F211



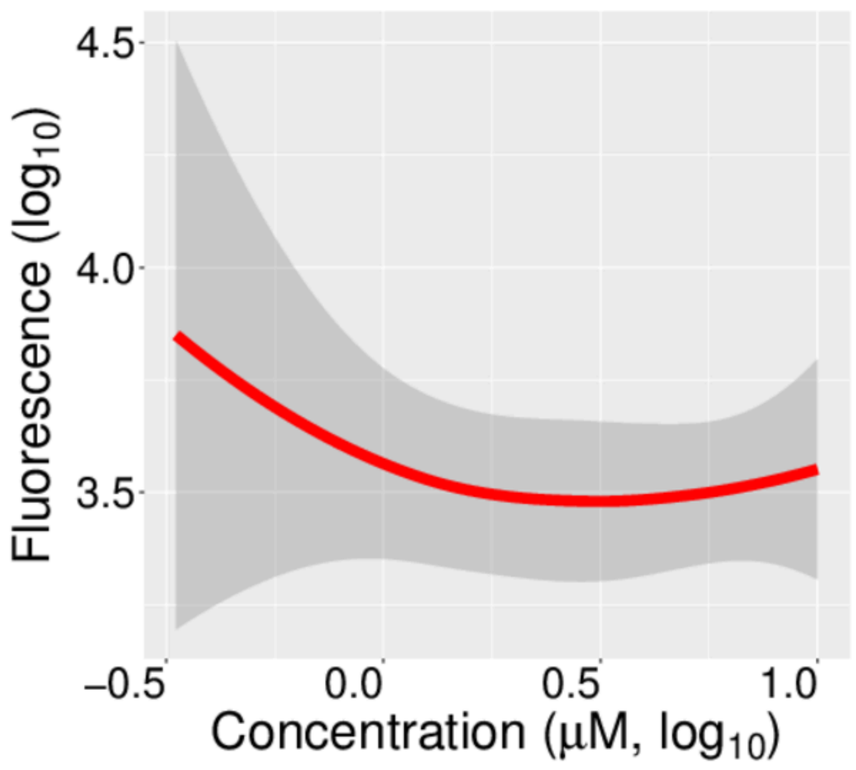
Rhodamine B
Channel: BL3 Code: F108



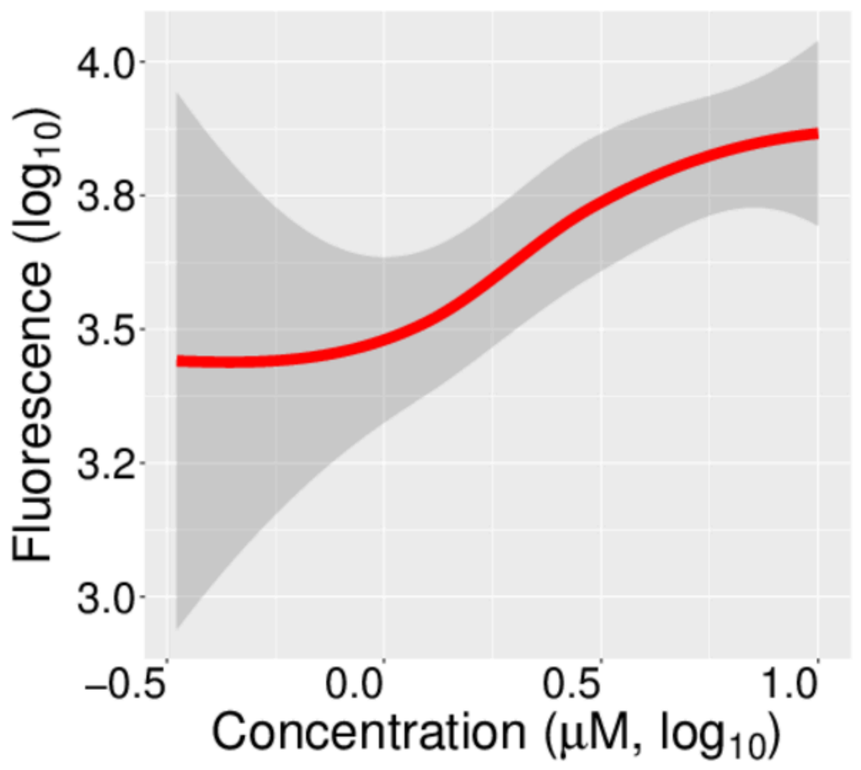
Riboflavin
Channel: BL3 Code: F109



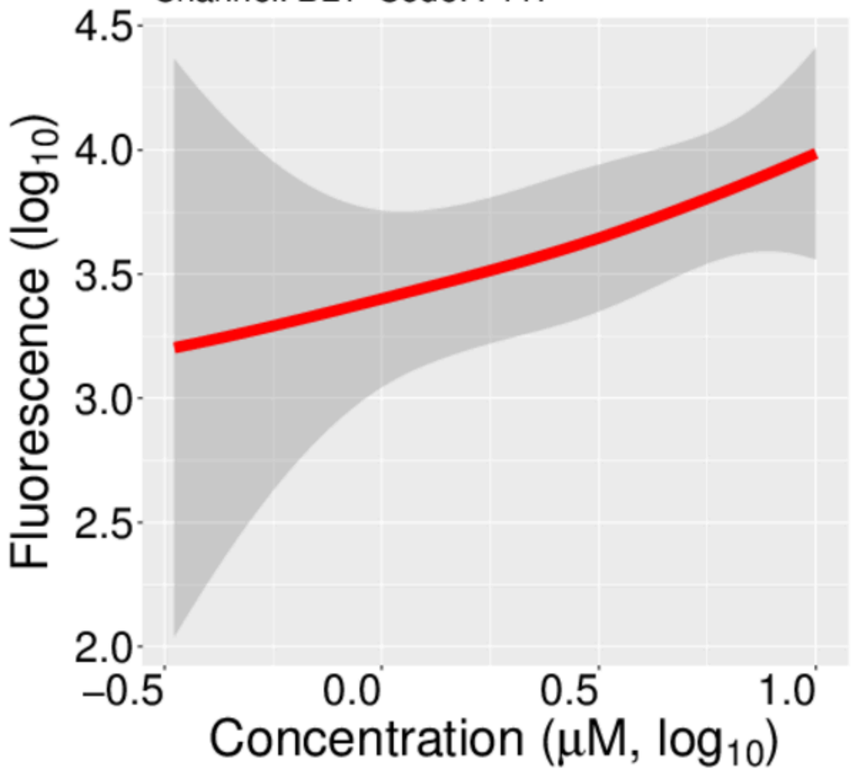
Sennoside A
Channel: VL4 Code: F112



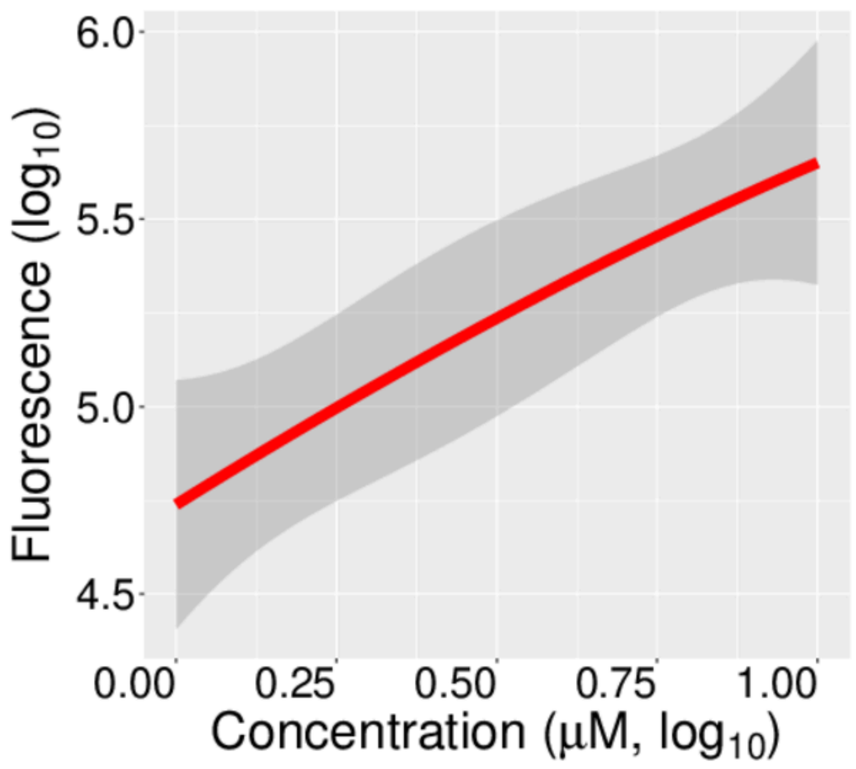
Sulphorhodamine B
Channel: BL3 Code: F115



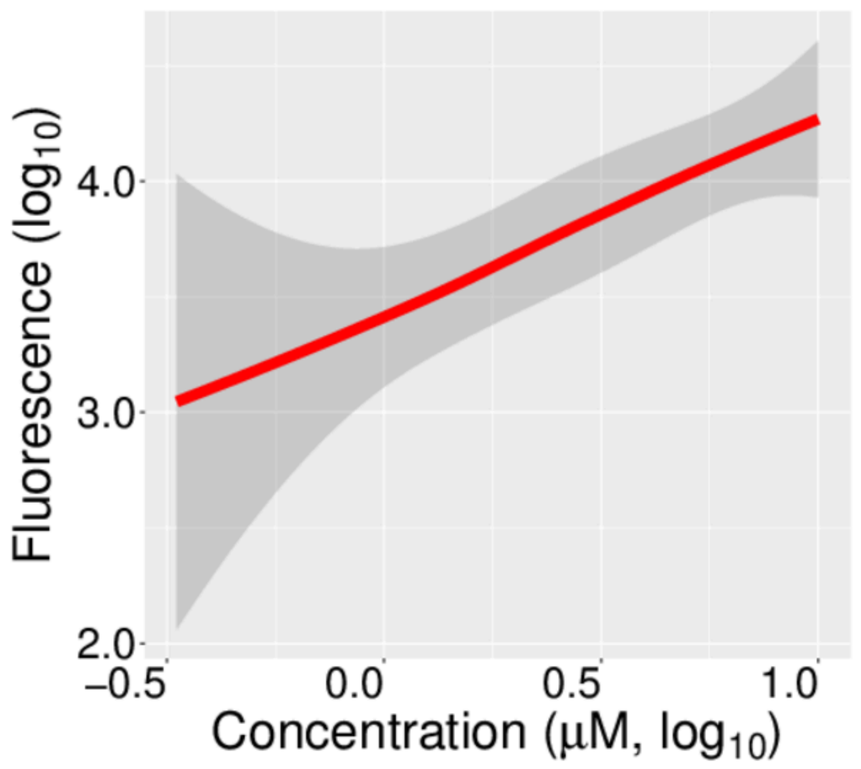
SYBR Green I
Channel: BL1 Code: F117

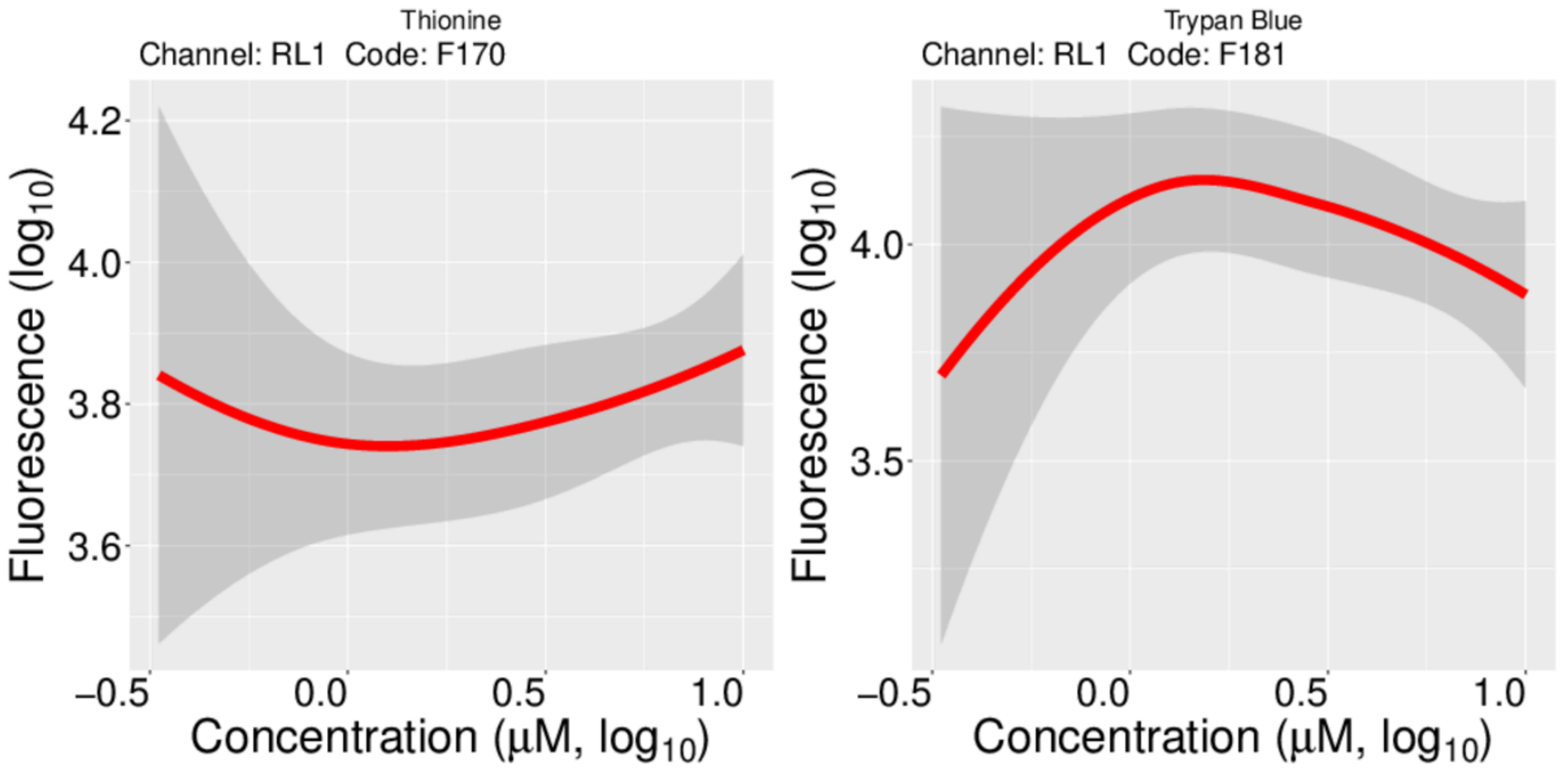


SYTO13
Channel: BL1 Code: F220

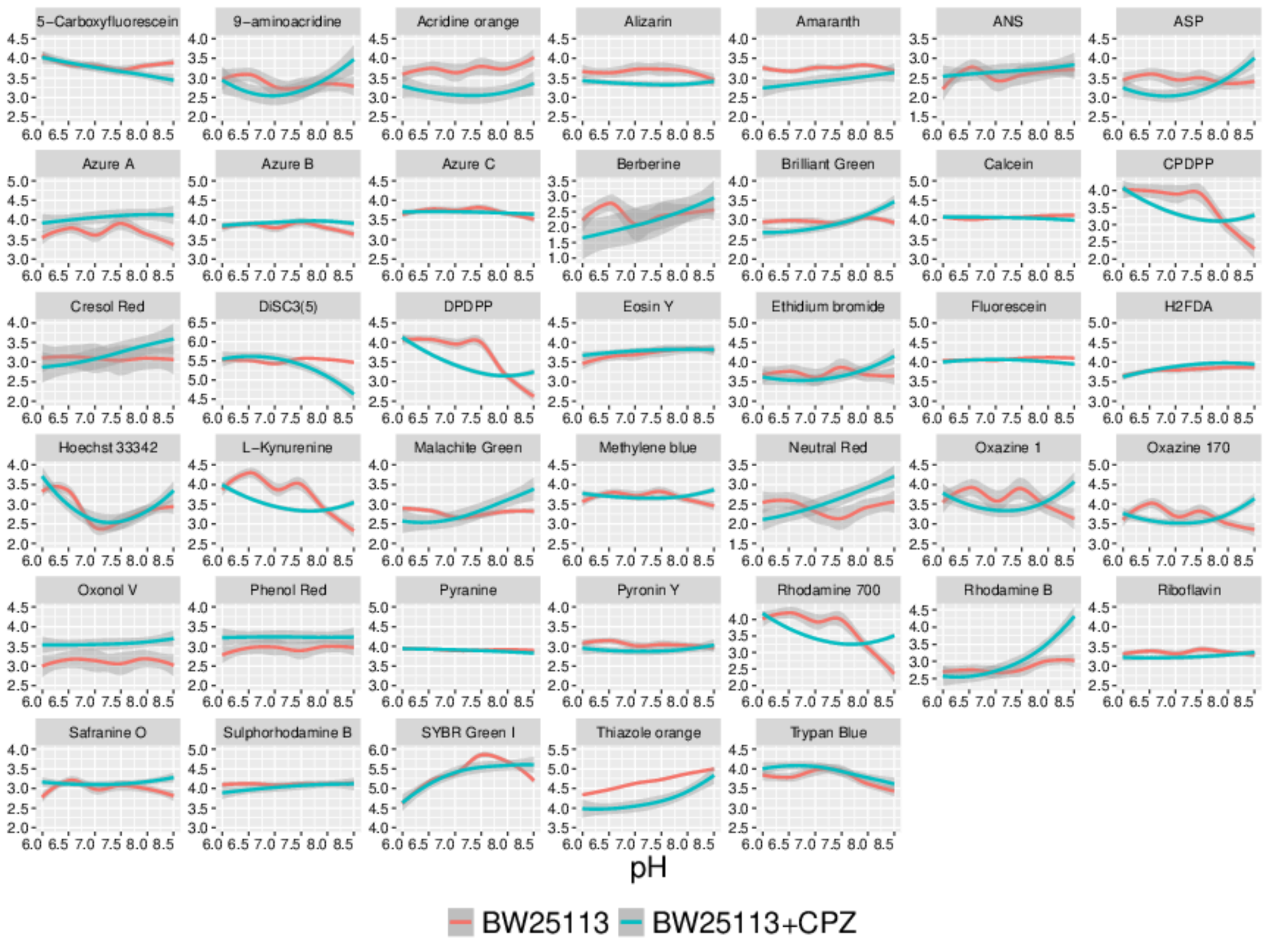


Thiazole orange
Channel: BL1 Code: F123

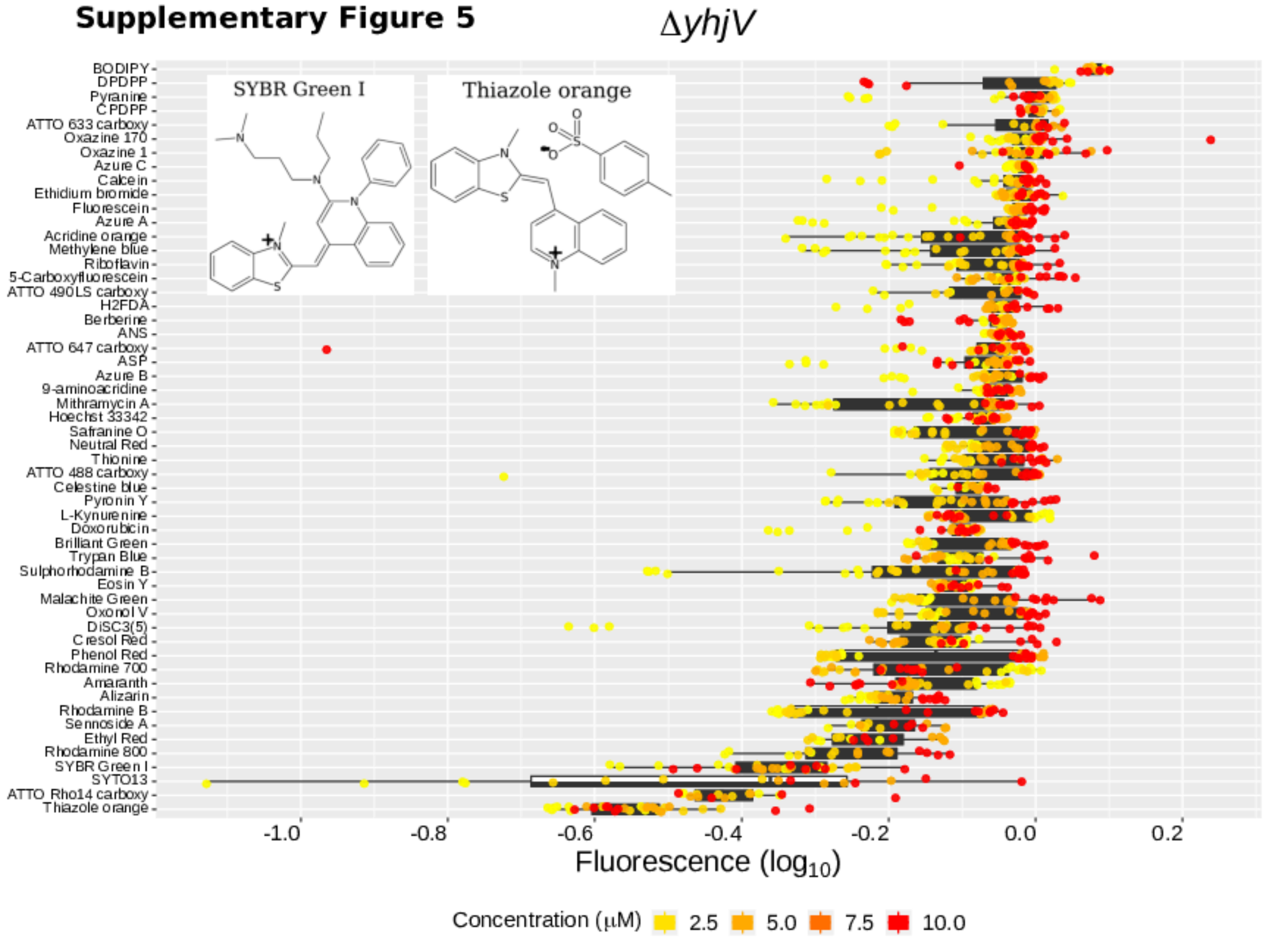




Supplementary Figure 3


5−Carboxyfluorescein
9−aminoacridine
Acridine orange
Alizarin
Amaranth
ANS
ASP
Azure A
Azure B
Azure C
Berberine
Brilliant Green
Calcein
CPDPP
Cresol Red
DiSC3(5)
DPDPP
Eosin Y
Ethidium bromide
Fluorescein
H2FDA
Hoechst 33342
L−Kynurenine
Malachite Green
Methylene blue
Neutral Red
Oxazine 1
Oxazine 170
Oxonol V
Phenol Red
Pyranine
Pyronin Y
Rhodamine 700
Rhodamine B
Riboflavin
Safranine O
Sulphorhodamine B
SYBR Green I
Thiazole orange
Trypan Blue
pH
BW25113
BW25113+CPZ

Supplementary Figure 5



Signal ratio

Supplementary Figure 6