Quantification of foscarnet with chromogenic and fluorogenic chemosensors: indicator displacement assays based on metal ion coordination with catechol ligand moiety

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Electronic Supplementary Information
Figure S1. Residual fluorescence \[\left(\frac{I_F - I_{\text{background}}}{I_{\text{max}} - I_{\text{background}}}\right) \times 100\%\] at 455 nm after the addition of 10 µM of Cu\(^{2+}\) and 10 µM of the ligand (Q) to the 10 µM of 4-methylesculetin, and after subsequent addition of 10 µM of PFA (PFA) or 0.9 mM of P\(_i\) (Pi) in 10 mM HEPES buffer (pH 7.0, 7.5, and 8.0) or in 10 mM CHES buffer (pH 8.5). The bidentante ligands are en (a), pca (b), phen (c), and tir (d). The excitation wavelength is 375 nm.
**Figure S2.** The fluorescence spectra of 4-methylesculetin (1, 10 µM) in MES buffer (10 mM, pH 6.0) (a) and MES buffer (10 mM, pH 6.5) (b). The quenched spectra (Q) are shown after 10 µM [Cu(pca)]²⁺ addition and fluorescence reappearance upon subsequent addition of 10 µM of PFA. The excitation wavelength is 375 nm.
**Figure S3.** The logarithm of complex formation constant with PFA ((O)₂POCO(O)³⁻) and phosphate (HOPO₃²⁻) is shown for various divalent metal cations (M²⁺). Data points are previously reported values by H. Sigel and coworkers"¹⁴,²¹ and depicted in this figure to illustrate the high stability of the Cu-complex.