## Supporting Information

$N, N^{\prime}, N^{\prime \prime}$-Tris[(5-methoxy-1H-indol-3-yl)ethyl]benzene-1,3,5-tricarboxamide
${ }^{1} \mathrm{H}$ and ${ }^{13} \mathrm{C}-\mathrm{NMR}$ spectra of compound 3 .


Figure S1. ${ }^{1} \mathrm{H}-\mathrm{NMR}$ spectrum of $\mathbf{3}$ in THF- $d_{8}(400 \mathrm{MHz})$.


Figure S2. ${ }^{1} \mathrm{H}-\mathrm{NMR}$ spectrum of $\mathbf{3}$ in $\mathrm{CD}_{3} \mathrm{CN}(500 \mathrm{MHz})$.


Figure S3. ${ }^{13} \mathrm{C}-\mathrm{NMR}$ spectrum of $\mathbf{3}$ in THF- $\mathrm{d}_{8}(400 \mathrm{MHz})$.


Figure S4. DEPT 135 spectrum of $\mathbf{3}$ in THF- $d_{8}(400 \mathrm{MHz})$.

2 Description of the ${ }^{1} \mathrm{H}$-NMR titrations
${ }^{1} \mathrm{H}-\mathrm{NMR}$ titrations were carried out in $\mathrm{CD}_{3} \mathrm{CN}$ at $25^{\circ} \mathrm{C}$ (dilution experiments show that compound 3 do not self-aggregate in the used concentration range).

Stock solutions in $\mathrm{CD}_{3} \mathrm{CN}$ were prepared for compound 3 and $\mathrm{NH}_{4} \mathrm{PF}_{6}$. These solutions and the corresponding solvent were combined in a manner so that the concentration of compound $\mathbf{3}$ was kept constant and that of $\mathrm{NH}_{4} \mathrm{PF}_{6}$ varied (three titrations were carried out). For each titration 16-20 samples were prepared and the ${ }^{1} \mathrm{H}$-NMR spectra were recorded (for an example, see Table S1). The titration data were analyzed by non-linear regression analysis, using the program WinEQNMR (see [1]).

Table S1. ${ }^{1} \mathrm{H}-\mathrm{NMR}$ titration of compound $\mathbf{3}$ with $\mathrm{NH}_{4} \mathrm{PF}_{6}$ in $\mathrm{CD}_{3} \mathrm{CN}$.

|  | $[$ Receptor $]$ <br> $m o l / L$ | $\left[\mathrm{NH}_{4} \mathrm{PF} 6\right]$ <br> $\mathrm{mol} / \mathrm{L}$ | Ratio |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | $[$ Receptor $]$ | $\left[\mathrm{NH}_{4} \mathrm{PF}_{6}\right]$ |  |
| 1 | 0.00100061 | 0.00000000 | 1 | 0.0000 |
| 2 | 0.00100061 | 0.00010587 | 1 | 0.1058 |
| 3 | 0.00100061 | 0.00021174 | 1 | 0.2116 |
| 4 | 0.00100061 | 0.00031762 | 1 | 0.3174 |
| 5 | 0.00100061 | 0.00042349 | 1 | 0.4232 |
| 6 | 0.00100061 | 0.00052936 | 1 | 0.5290 |
| 7 | 0.00100061 | 0.00063523 | 1 | 0.6348 |
| 8 | 0.00100061 | 0.00074110 | 1 | 0.7407 |
| 9 | 0.00100061 | 0.00084698 | 1 | 0.8465 |
| 10 | 0.00100061 | 0.00105872 | 1 | 1.0581 |
| 11 | 0.00100061 | 0.00127046 | 1 | 1.2697 |
| 12 | 0.00100061 | 0.00148221 | 1 | 1.4813 |
| 13 | 0.00100061 | 0.00190570 | 1 | 1.9045 |
| 14 | 0.00100061 | 0.00211744 | 1 | 2.1162 |
| 15 | 0.00100061 | 0.00232918 | 1 | 2.3278 |
| 16 | 0.00100061 | 0.00254093 | 0.00296442 | 1 |

3 Mole ratio plot for the ${ }^{1} \mathrm{H}-\mathrm{NMR}$ titration of compound $\mathbf{3}$ with $\mathrm{NH}_{4} \mathrm{PF}_{6}$ in $\mathrm{CD}_{3} \mathrm{CN}$.


Figure S5. Mole ratio plot: Titration of compound $\mathbf{3}$ with $\mathrm{NH}_{4} \mathrm{PF}_{6}$ in $\mathrm{CD}_{3} \mathrm{CN}$; [3] $=1 \mathrm{mM}$ (analysis of the complexation-induced upfield shift of the benzene CH of $\mathbf{3}$ ).

## Reference

1. Hynes, M.J. EQNMR: A computer program for the calculation of stability constants from nuclear magnetic resonance chemical shift data. J. Chem. Soc. Dalton Trans. 1993, 311-312.
