

**Table S4.** Comparison of the pharmacological profiles determined in the *Xenopus* oocyte (this work) to available functional and binding studies on Human Adenosine Receptors.

**Human A<sub>1</sub> agonist Profile**

|                                         |                                                  |
|-----------------------------------------|--------------------------------------------------|
| Human A <sub>1</sub> oocyte             | CPA>R-PIA=NECA>2ClAdo>S-PIA>DPMA>CV1808>CGS21680 |
| Human A <sub>1</sub> Binding Study      | R-PIA>NECA>Ado>S-PIA>>CGS21680                   |
| Human A <sub>1</sub> Functional studies | CPA>R-PIA=CHA≥NECA>2ClAdo>S-PIA>CV1808≥CGS21680  |

**Human A<sub>2b</sub> agonist Profile**

|                                          |                                                  |
|------------------------------------------|--------------------------------------------------|
| Human A <sub>2b</sub> oocyte             | NECA>R-PIA>2ClAdo>CPA>DPMA>S-PIA>CV1808>CGS21680 |
| Human A <sub>2b</sub> Binding Study      | Profile unavailable                              |
| Human A <sub>2b</sub> Functional Studies | NECA>2ClAdo>R-PIA=CHA>S-PIA≥CV1808≥CGS21680      |

**Human A<sub>2b</sub> antagonist Profile**

|                                          |                                                                                                          |
|------------------------------------------|----------------------------------------------------------------------------------------------------------|
| Human A <sub>2b</sub> oocyte             | 8PT>PD115199>DPCPX>CGS15943>CSC                                                                          |
| Human A <sub>2b</sub> Binding Study      | Inhibited by theophylline                                                                                |
| Human A <sub>2b</sub> Functional Studies | DPCPX=8PT≥PD115199                                                                                       |
| Rat Binding Studies                      | CGS15943>PD115199>CP66713>XAC>CPX>8PT>Alloxazine>8-p-SPT>HTQZ>Tracazolate>CSC>DPMX>Caffeine>Theophylline |