**Figure 1 –** **Source Data 5:** Reactions and rates constant involved in signaling pathways leading from cAMP to PKA

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Reaction equation | Kf (nM-1Sec-1) | Kb (Sec-1) | Kcat (Sec-1) | Reference  |
| *PKA + 2cAMP* $\leftrightarrow $*PKAcAMP2* | 2.16E-04 | 6.00E-02 |  | Herberg et al., 1996; Jȩdrzejewska-Szmek et al., 2017; Ogreid and Døskeland, 1981 |
| *PKAcAMP2+2cAMP*$ \leftrightarrow $*PKAcAMP4* | 3.50E-04 | 6.00E-01 |  | Herberg et al., 1996; Jȩdrzejewska-Szmek et al., 2017; Ogreid and Døskeland, 1982 |
| *PKAcAMP4*$ \leftrightarrow $ *PKAr + PKAc* | 2.40E-01 | 2.55E-02 |  | Jȩdrzejewska-Szmek et al., 2017; Zawadzki and Taylor, 2004 |
| *PDE2+cAMP* $\leftrightarrow $ *PDE2cAMP* | 2.00E-05 | 5.00E-01 |  | Blackwell et al., 2019 |
| *PDE2cAMP+cAMP* $\leftrightarrow $*PDE2cAMP2 +AMP* | 5.90E-03 | 5.00E-01 | 5.40E+00 | Blackwell et al., 2019 |
| *PDE4+cAMP* $\leftrightarrow $ *PDE4 +AMP* | 2.16E-02 | 6.90E+01 | 1.72E+01 | Herman et al., 2000; Jȩdrzejewska-Szmek et al., 2017 |

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