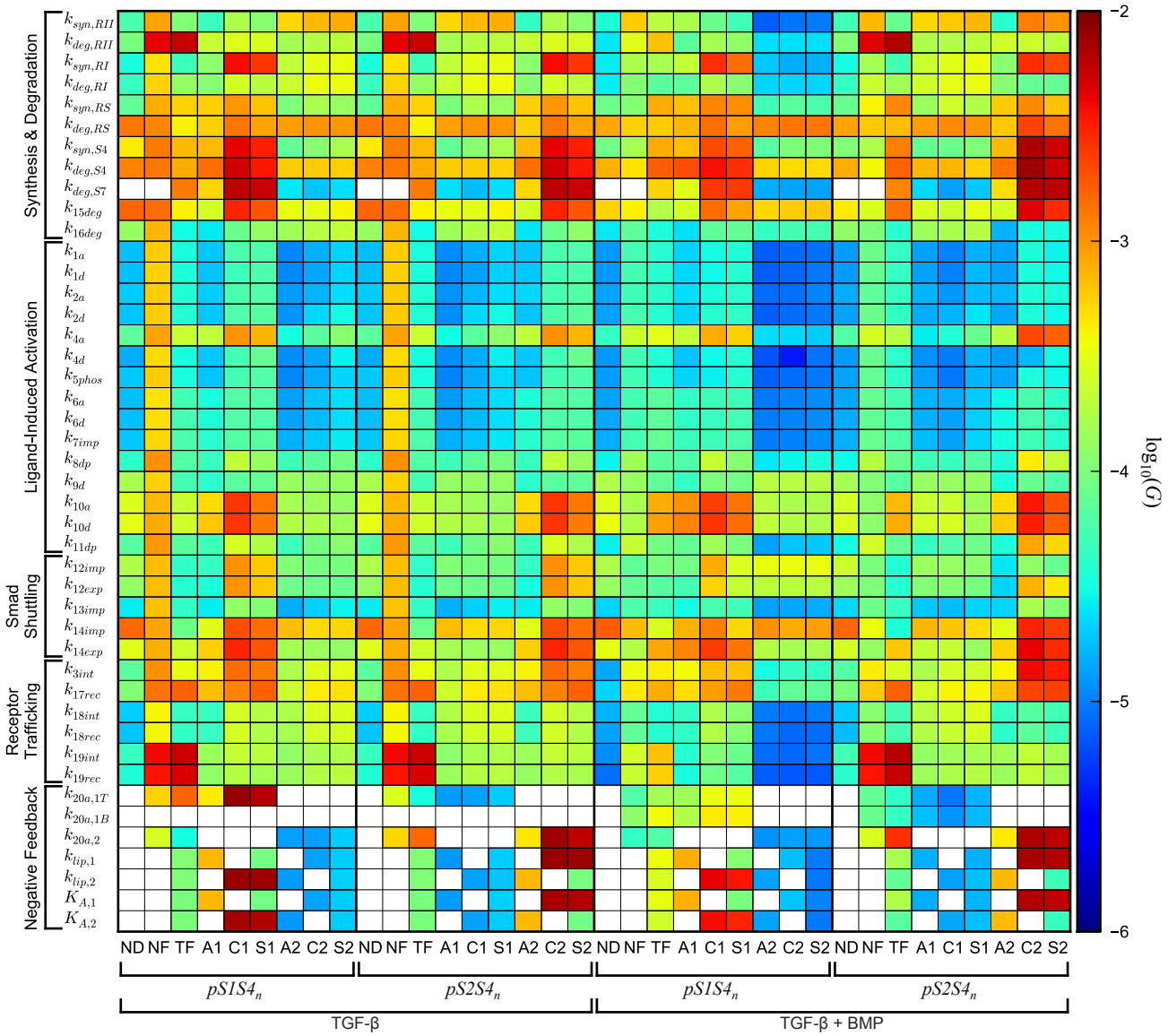
Synthesis & Degradation
Ligand-Induced Activation
Smad Shuttling
Receptor Trafficking
Negative Feedback
$k_{syn,RII}$
$k_{deg,RII}$
$k_{syn,RI}$
$k_{deg,RI}$
$k_{syn,RS}$
$k_{deg,RS}$
$k_{syn,S4}$
$k_{deg,S4}$
$k_{deg,S7}$
k_{15deg}
k_{16deg}
k_{1a}
k_{1d}
k_{2a}
k_{2d}
k_{4a}
k_{4d}
k_{5phos}
k_{6a}
k_{6d}
k_{7imp}
k_{8dp}
k_{9d}
k_{10a}
k_{10d}
k_{11dp}
k_{12imp}
k_{12exp}
k_{13imp}
k_{14imp}
k_{14exp}
k_{3int}
k_{17rec}
k_{18int}
k_{18rec}
k_{19int}
k_{19rec}
$k_{20a,1T}$
$k_{20a,1B}$
$k_{20a,2}$
$k_{lip,1}$
$k_{lip,2}$
$K_{A,1}$
$K_{A,2}$
ND NF TF A1 C1 S1 A2 C2 S2
$pS1S4_n$
$pS2S4_n$
TGF-β
TGF-β + BMP
−2
−3
−4
−5
−6
$\log_{10}(G)$

Figure S2