Table 2. Rate coefficients

Carbon monoxide		Henry *et al*.(1)*	Simulations†
$k_{gem}(t)$	s^{-1}	8×10^3	3.3×10^4
$k_{gem}(r)$	s^{-1}	6×10^6	5×10^6
$k_{diss}(t)$	s^{-1}	0.07	0.2
$k_{diss}(r)$	s^{-1}	0.02	0.022
$k(t,r)_{out}$	s^{-1}	7×10^6	6×10^6
$k(t,r)_{in}$	$M^{-1} \bullet s^{-1}$	7×10^6	2.2×10^7
$k_T(r \rightarrow t)$§	s^{-1}	$1 \times 10^8/\sigma$	$1 \times 10^8/\sigma$
$k_T(t \rightarrow r)$	s^{-1}	$3 \times 10^5/\sigma$	$1.5 \times 10^5/\sigma$
$k_T(rx \rightarrow tx)$	s^{-1}	$90/\sigma$	$200/\sigma$
$k_T(tx \rightarrow rx)$	s^{-1}	$900/\sigma$	$400/\sigma$
Carbon monoxide		Unzai et al.(2)‡	
$k_{on}(t)$	$M^{-1} \bullet s^{-1}$	8×10^4	1.2×10^5
$k_{off}(t)$	s^{-1}	0.2	0.2
$k_{on}(r)$	$M^{-1} \bullet s^{-1}$	1×10^7	1×10^7
$k_{off}(r)$	s^{-1}	0.01	0.012
Oxygen			
$k_{on}(t)$	$M^{-1} \bullet s^{-1}$	8×10^6	6.8×10^6
$k_{off}(t)$	s^{-1}	3×10^3	1.1×10^3
$k_{on}(r)$	$M^{-1} \bullet s^{-1}$	1×10^8	1×10^8
$k_{off}(r)$	s^{-1}	20	12

*0.1 M potassium phosphate, pH 7, 20ºC.

†Gel conditions, 15ºC (see *Methods*).

‡pH 7.4, 25ºC (plus 0.1 mM IHP for the quaternary *T*-state, which corresponds to the *t* state of the TTS model). The overall binding and dissociation rate coefficients [$k_{on}(t,r)$ and $k_{off}(t,r)$] are related to the rate coeffcieints of the TTS model by:

$$k_{on}(t,r) = k_{in}\frac{k_{gem}(t,r)}{k_{gem}(t,r)+k_{out}} \quad \text{and} \quad k_{off}(t,r) = k_{out}\frac{k_{diss}(t,r)}{k_{gem}(t,r)+k_{out}}.$$

§σ is the slowing factor due to the constraints of encapsulation by the gel.

1. Henry, E. R., Bettati, S., Hofrichter, J. & Eaton, W. A. (2002) *Biophys. Chem.* **98,** 149-164.
2. Unzai, S., Eich, R., Shibayama, N., Olson, J. S. & Morimoto, H. (1998) *J. Biol. Chem.* **273,** 23150-23159.