

TABLE 3. Kinetic constants of the *H. neapolitanus* carboxysomal carbonic anhydrase CsoSCA

Fraction	Kinetic constant value for:			
	Hydration reaction ^a		Dehydration reaction ^b	
	k_{cat} (s ⁻¹)	K_m (mM)	k_{cat} (s ⁻¹)	K_m (mM)
rCsoSCA	$(8.9 \pm 0.5) \times 10^4$	3.2 (\pm 0.4)	$(4.6 \pm 1.2) \times 10^4$	9.3 (\pm 2.1)
Broken carboxysomes	$(6.5 \pm 0.9) \times 10^4$	3.6 (\pm 0.7)	$(3.1 \pm 0.8) \times 10^4$	10.1 (\pm 3.2)
Intact carboxysomes	$(1.8 \pm 0.2) \times 10^4$	12.2 (\pm 2.3)	ND	ND

^a The hydration reaction was performed at pH 8.0.

^b The dehydration reaction was performed at pH 7.0. ND, not determined.