

Table 4. Photosynthetic absorption cross-section area for AAP bacteria, oxygenic photosynthetic phytoplankton and bacteriorhodopsin measured at the indicated wavelength.

Sample	Wavelength (nm)	Area (10^{-20} m ²)	LH2?	Reference
AAP bacteria in Pacific	470	62	No	Kolber and colleagues (2001)
<i>Erythrobacter</i> (three strains)	470	40–45	No	Koblížek and colleagues (2003)
<i>Erythrobacter</i> NAP1	470	33	No	Koblížek and colleagues (2005)
<i>Roseobacter denitrificans</i>	470	42	Yes	Koblížek and colleagues (2005)
<i>R. denitrificans</i>	530	73	Yes	Tang and colleagues (2010)
Phytoplankton in Pacific	470	420	NA	Kolber and colleagues (2001)
Bacteriorhodopsin	568	2	NA	See text

The area units of 10^{-20} m² are equivalent to Å². The presence or absence of a second light-harvesting complex (LH2) in AAP bacteria is also indicated.

NA, not applicable.

Kolber, Z.S., Plumley, F.G., Lang, A.S., Beatty, J.T., Blankenship, R.E., Van Dover, C.L., *et al.* (2001) Contribution of aerobic photoheterotrophic bacteria to the carbon cycle in the ocean. *Science* **292**: 2492–2495.

Koblížek, M., Beja, O., Bidigare, R.R., Christensen, S., Benitez-Nelson, B., Vetriani, C., *et al.* (2003) Isolation and characterization of *Erythrobacter* sp strains from the upper ocean. *Arch Microbiol* **180**: 327–338.

Koblížek, M., Shih, J.D., Breitbart, S.I., Ratcliffe, E.C., Kolber, Z.S., Hunter, C.N., and Niederman, R.A. (2005) Sequential assembly of photosynthetic units in *Rhodobacter sphaeroides* as revealed by fast repetition rate analysis of variable bacteriochlorophyll a fluorescence. *Biochim Biophys Acta* **1706**: 220–231.

Tang, K., Zong, R., Zhang, F., Xiao, N., and Jiao, N. (2010) Characterization of the photosynthetic apparatus and proteome of *Roseobacter denitrificans*. *Curr Microbiol* **60**: 124–133.