THE CRYSTAL STRUCTURE OF THE RC/LH1 COMPLEX FROM RHODOPSEUDOMONAS PALUSTRIS
A.W. Roszak1  T.D. Howard2  J. Southall1  A.T. Gardiner2  N.W. Isaacs1  R.J. Cogdoll2
1University of Glasgow Department of Chemistry University Avenue GLASGOW G12 8QQ UK 2Division of Biochemistry and Molecular Biology, University of Glasgow, G12 8QQ, UK

A typical purple bacterial photosynthetic unit is composed of a reaction centre (RC) and two types of antenna complexes (LH1 and LH2). LH1 forms a stoichiometric complex with RC, called the RC/LH1 core complex, while LH2 antennas are arranged peripherally around the core. All of these pigment-protein complexes are integral membrane proteins. High-resolution structures have been determined for both the RC alone and the LH2. So far however the best structural data on LH1 has come from an 8.5 Å projection map obtained from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.

wrapping up the pseudodimeric structure of the RC, as it was expected to be interesting feature of this structure is the oval shape of the LH1 complex modeling of LH1 components in subsequent electron density maps. The most

from electron diffraction of 2D-crystal of LH1 from Rhodopseudomonas palustris. We report here the structure of RC/LH1 core complex from R. palustris, which was isolated from membranes following solubilization with the LDAO. The complex was purified by a combination of ion exchange and molecular sieve chromatography, then for crystallization exchanged into 1% sucrose.

Keywords: REACTION CENTRE, LIGHT-HARVESTING COMPLEX, circular.