

W0300

Crystal Structure of Conserved Hypothetical Protein Rv0390 from *Mycobacterium tuberculosis*. T. Radhakannan*, E.H. Bursley*, M.Yu*, B.W. Segelke[§], T. Lakin[§], D. Toppani, C.-Y. Kim[†], S.T.A. Kaviratne[†], T. Woodruff[†], T.C. Terwilliger[†], L.-W. Hung^{†*}, *Lawrence Berkeley National Laboratory, Berkeley, CA 94720, [§]Lawrence Livermore National Laboratory, Livermore CA 94550, [†]Los Alamos National Laboratory, Los Alamos NM 87545.

We report the crystal structure of a conserved hypothetical protein, Rv0390, from *Mycobacterium tuberculosis*. The initial phase information was obtained by SAD method using Br derivative and the resulting model was refined to a final R factor of 17.5% and free-R factor of 21.8% at 1.8Å resolution. The overall structure of Rv0390 consists of one central parallel five-stranded β -sheet surrounded by α -helices on both sides. The sequence of Rv0390 is homologous to the uncharacterized rhodanese homology domain (RHOD_1) super family. Its 3-dimensional structure is similar to that of sulfurtransferase, which is also a member of the rhodanese family. A detailed structure description and a hypothetical function of Rv0390 will be presented.