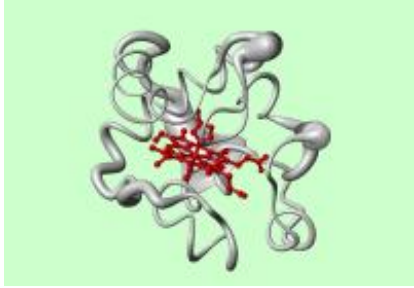
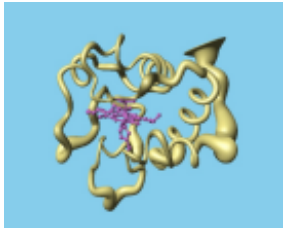

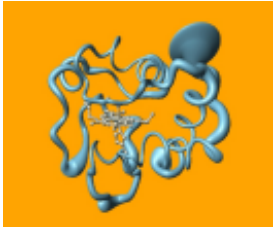
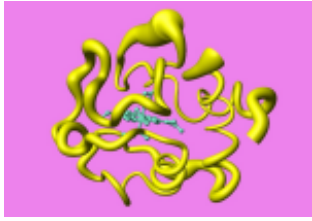
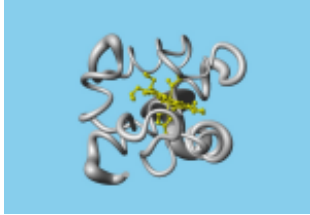
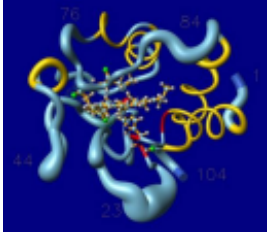

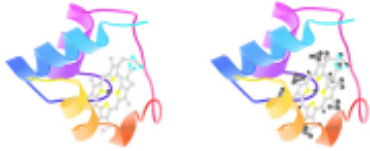

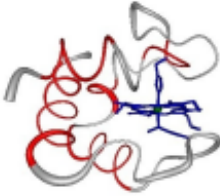



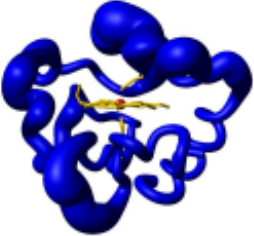

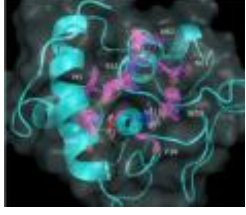


CYTOCHROMES

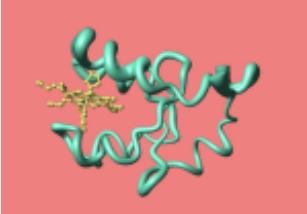
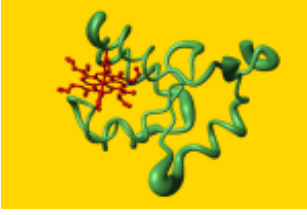
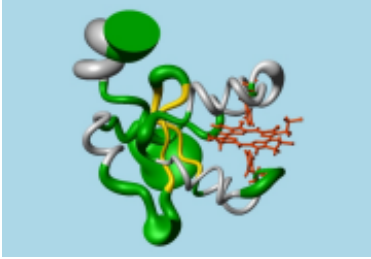
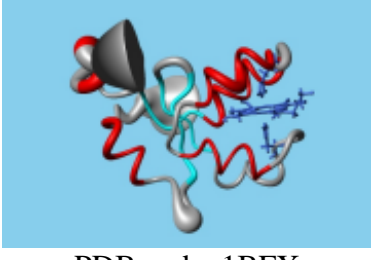
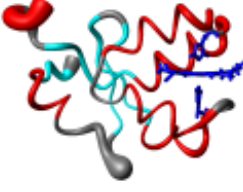
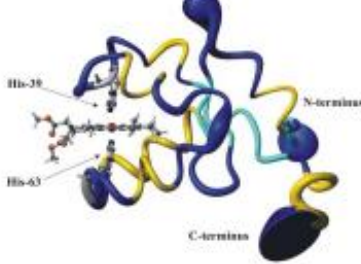
Mono-heme cytochromes *c*

<p>Banci, L., Bertini, I., Bren, K.L., Gray, H.B., Sompornpisut, P., Turano P. Three-dimensional solution structure of the cyanide adduct of a Met80Ala variant of <i>Saccharomyces cerevisiae</i> iso-1-cytochrome <i>c</i>. Identification of ligand-residue interactions in the distal heme cavity Biochemistry, 34: 11385- 11398, 1995</p>	 <p>PDB code: 1FHB</p>
<p>Baistrocchi, P., Banci, L., Bertini, I., Turano, P., Bren, K.L., Gray, H.B. Three-dimensional solution structure of <i>Saccharomyces cerevisiae</i> reduced iso-1-cytochrome <i>c</i> Biochemistry, 35: 13788-13796, 1996</p>	 <p>PDB code: 1YFC</p>
<p>Banci, L., Bertini I., Quacquareni, G., Walter, O., Diaz, A., Hervás, M., De la Rosa, M.A. The solution structure of cytochrome <i>c</i>₆ the from green alga <i>Monoraphidium braunii</i> J.Biol.Inorg.Chem., 1: 330-340, 1996</p>	 <p>PDB code: 1CED</p>
<p>Banci, L., Bertini, I., Bren, K.L., Gray, H.B., Sompornpisut, P., Turano, P. Solution structure of oxidized <i>Saccharomyces cerevisiae</i> iso-1-cytochrome <i>c</i> Biochemistry, 36: 8992-9001, 1997</p>	 <p>PDB code: 1YIC</p>
<p>Banci, L., Bertini, I., Gray, H.B., Luchinat, C., Reddig, T., Rosato, A., Turano, P. Solution structure of oxidized horse heart cytochrome <i>c</i> Biochemistry, 36: 9867-9877, 1997</p>	 <p>PDB code: 1AKK</p>

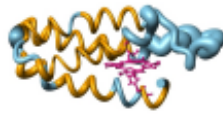
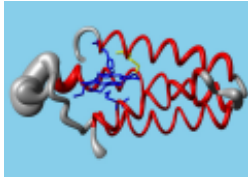
<p>Banci, L., Bertini, I., De la Rosa, M.A., Koulougliotis, D., Navarro, J.A. and Walter, O. Solution structure of oxidized cytochrome c_6 from the green alga <i>Monoraphidium braunii</i> Biochemistry, 37: 4831-4843, 1998</p>	 <p>PDB code: 1A2S</p>
<p>Banci, L., Bertini, I., Huber, J.G., Spyroulias, G. A., Turano, P. Solution structure of reduced horse heart cytochrome c J.Biol.Inorg.Chem., 4: 21-31, 1999</p>	 <p>PDB code: 1GIW, 2GIW</p>
<p>Garau, G., Geremia, S., Randaccio, L., Vaccari, L., Viezzoli, M. S. Crystallization and preliminary X-Ray analysis of two pH-dependent forms of cytochrome c_2 from <i>Rhodopseudomonas palustris</i> Acta Crystallogr.,Sect.D, 56: 1699-1701, 2000</p>	 <p>PDB code: 1HH7</p>
<p>Benini, S., Gonzalez, A., Rypniewski, W. R., Wilson, K. S., Van-Beeumen, J. J., Ciurli, S. Crystal structure of oxidized <i>Bacillus pasteurii</i> cytochrome c_{553} at 0.97-Å resolution Biochemistry, 39: 13115-13126, 2000</p>	 <p>PDB code: 1B7V, 1C75</p>
<p>Banci, L., Bertini, I., Liu, G., Lu, J., Reddig, T., Tang, W., Wu, Y., Yao, Y., Zhu, D. Effects of extrinsic imidazole ligation on the molecular and electronic structure of cytochrome c J.Biol.Inorg.Chem., 6: 628-637, 2001</p>	 <p>PDB code: 1FI7, 1FI9</p>
<p>Banci, L., Bertini, I., Ciurli, S., Dikiy, A., Dittmer, J., Rosato, A., Sciara, G., Thompson, A.R. NMR solution structure, backbone mobility and homology modeling of c-type cytochromes from gram-positive bacteria ChemBioChem, 3: 299-310, 2002</p>	 <p>PDB code: 1K3G, 1K3H</p>

<p>Bartalesi, I., Bertini, I., Hajieva, P., Rosato, A., Vasos, P. R. Solution structure of a monoheme ferrocyclochrome <i>c</i> from <i>Shewanella putrefaciens</i> and structural analysis of sequence-similar proteins: functional implications Biochemistry, 41: 5112-5119, 2002</p>	 <p>PDB code: 1KX2, 1KX7</p>
<p>Calligaris, M., Garau, G., Geremia, S., Randaccio, L. Sgarra, R., Vaccari, L., Viezzoli, M.S Cleavage of the iron-methionine bond in c-type cytochromes: crystal structure of oxidized and reduced cytochrome <i>c</i>₂ from <i>Rhodospseudomonas palustris</i> and its ammonia complex Protein Sci., 11: 6-17, 2002</p>	 <p>PDB code: 1FJ0, 1I8O, 1I8P</p>
<p>Dikiy, A., Carpentier, W., Vandenberghe, I., Borsari, M., Safarov, N., Dikaya, E., Van Beeumen, J., Ciurli, S. Structural basis for the molecular properties of cytochrome <i>c</i>₆ Biochemistry, 41: 14689-14699, 2002</p>	 <p>PDB code: 1LS9</p>
<p>Assfalg, M., Bertini, I., Dolfi, A., Turano, P., Mauk, A.G., Rosell, F.I., Gray H.B. Structural model for an alkaline form of ferricytochrome <i>c</i> J.Am.Chem.Soc., 125: 2913-2922, 2003</p>	 <p>PDB code: 1LMS</p>
<p>Bartalesi, I., Bertini, I., Rosato., A. Structure and dynamics of reduced <i>Bacillus pasteurii</i> cytochrome <i>c</i>: oxidation state dependent properties and implications for electron transfer processes Biochemistry, 42: 739-745, 2003</p>	 <p>PDB code: 1N9C</p>
<p>Assfalg, M., Bertini, I., Del Conte, R., Giachetti, A., Turano, P. Cytochrome <i>c</i> and organic molecules: the solution structure of para-aminophenol adduct Biochemistry, 46: 6232-6238, 2007</p>	 <p>PDB code: 2ORL, 2HV4</p>

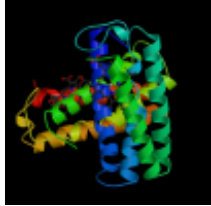
Cytochromes b_5

<p>Banci, L., Bertini, I., Ferroni, F., Rosato, A. Solution structure of reduced microsomal rat cytochrome b_5 Eur.J.Biochem., 249: 270-279, 1997</p>	 <p>PDB code: 1AQA</p>
<p>Arnesano, F., Banci, L., Bertini, I., Felli, I.C. The solution structure of oxidized rat microsomal cytochrome b_5 Biochemistry, 37: 173-184, 1998</p>	 <p>PDB code: 1AW3, 1AXX, 2AXX</p>
<p>Arnesano F., Banci, L., Bertini, I., Koulougliotis. Solution structure of oxidized rat microsomal cytochrome b_5 in the presence of 2M guanidinium chloride: monitoring the early steps in protein unfolding Biochemistry, 37: 17082-17092, 1998</p>	 <p>PDB code: 1BLV</p>
<p>Arnesano, F., Banci, L., Bertini, I., Felli, I., Koulougliotis, D. Solution structure of the B form of oxidized rat microsomal cytochrome b_5 and backbone dynamics via ^{15}N rotating frame NMR relaxation measurements: biological implications Eur.J.Biochem., 260: 347-354, 1999</p>	 <p>PDB code: 1BFX</p>
<p>Banci, L., Bertini, I., Rosato, A., Scacchieri, S. Solution structure of oxidized microsomal rabbit cytochrome b_5. Factors determining the heterogeneous binding of the heme Eur.J.Biochem., 267: 755-766, 2000</p>	 <p>PDB code: 1DO9</p>
<p>Banci, L., Bertini, I., Branchini, B., Hajieva, P., Spyroulias, G.A., Turano, P. Dimethyl propionate ester heme-containing cytochrome b_5: structure and stability J.Biol.Inorg.Chem., 6: 490-503, 2001</p>	 <p>PDB code: 1MNY</p>

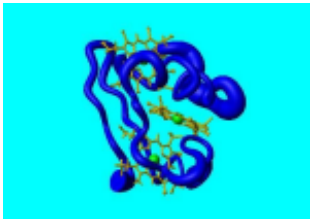
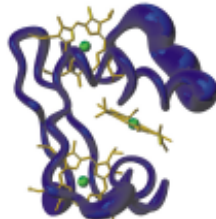
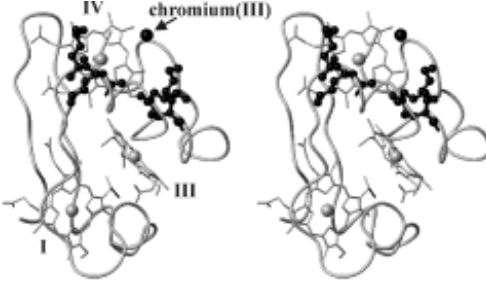

Cytochromes *b*₅₆₂

<p>Arnesano, F., Banci, L., Bertini, I., Faraone-Mennella, J., Rosato, A., Barker, P.D., Fersht, A.R. The solution structure of oxidized <i>Escherichia coli</i> cytochrome <i>b</i>₅₆₂ Biochemistry, 38: 8657-8670, 1999</p>	 <p>PDB code: 1QPU</p>
<p>Arnesano, F., Banci, L., Bertini, I., Ciofi-Baffoni, S., de Lumley Woodyear, T., Johnson, C.M., Barker, P.D. Structural consequences of b- to c- type heme conversion in oxidized <i>Escherichia coli</i> cytochrome <i>b</i>₅₆₂ Biochemistry, 39: 1499-1514, 2000</p>	 <p>PDB code: 1QQ3</p>


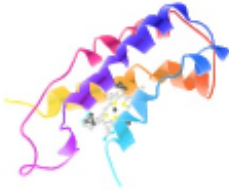
Cytochromes *c*'

<p>Archer, M., Banci, L., Dikaya, E., Romao, M. J. Crystal structure of cytochrome <i>c</i>' from <i>Rhodocyclus gelatinosus</i> and comparison with other cytochromes <i>c</i>' J.Biol.Inorg.Chem., 2: 611-622, 1997</p>	 <p>PDB code: 1JAF</p>
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Three-heme c-type cytochromes

<p>Assfalg, M., Banci, L., Bertini, I., Bruschi, M., and Turano, P. 800 MHz ^1H NMR solution structure refinement of oxidized cytochrome c_7 from <i>Desulfuromonas acetoxidans</i> Eur.J.Biochem., 256: 261-270, 1998</p>	 <p>PDB code: 1NEW, 2NEW</p>
<p>Assfalg, M., Banci, L., Bertini, I. Bruschi, M. Giudici-Orticoni, M.T., Turano, P. A proton-NMR investigation of the fully reduced cytochrome c_7 from <i>Desulfuromonas acetoxidans</i>: comparison between the reduced and the oxidized forms Eur.J.Biochem., 266: 634-643, 1999</p>	 <p>PDB code: 1EHJ, 1F22</p>
<p>Assfalg, M., Bertini, I. Bruschi, C. Michel and Turano, P. The metal reductase activity of some multiheme cytochromes c: NMR structural characterization of the reduction of chromium(VI) to chromium(III) by cytochrome c_7 Proc.Natl.Acad.Sci. USA, 99: 9750-9754, 2002</p>	 <p>PDB code: 1LM2</p>
<p>Assfalg, M., Bertini, I., Turano, P., Bruschi, M., Durand, M.C., Giudici-Orticoni, M.T., Dolla., A. A quick solution structure determination of the fully oxidized double mutant K9-10A cytochrome c_7 from <i>Desulfuromonas acetoxidans</i> and mechanistic implications J.Biomol.NMR, 22: 107-122, 2002</p>	 <p>PDB code: 1KWJ, 1L30</p>

Other heme binding proteins

<p>Arnesano, F., Banci, L., Barker, P.D., Bertini, I., Rosato, A., Su, X.C., Viezzoli, M.S. Solution structure and characterization of the heme chaperone Ccme Biochemistry, 41: 13587-13594, 2002</p>	 <p>PDB code: 1J6Q, 1LM0</p>
<p>Bertini, I., Faraone-Mennella, J., Gray, H.B., Luchinat, C., Parigi, G., Winkler, J.R. NMR-validated structural model for oxidized <i>Rhodopseudomonas palustris</i> cytochrome <i>c</i>₅₅₆ J.Biol.Inorg.Chem., 9: 224-230, 2004</p>	 <p>PDB code: 1P8G, 1S05</p>