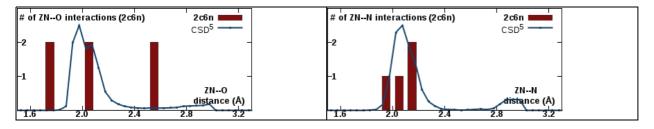
CheckMyMetal(CMM) report for PDB code: 2c6n

PDB title: Structure of human somatic angiontensin-i converting enzyme n domain with lisinopril (3.0Å)

ID	Res.	Metal		B factor (env.) ¹		Valence ²	nVECSUM ³	Geometry ^{1,4}	gRMSD(°) ¹	Vacancy ¹	Bidentate	Alt. metal
A:701	ZN	Zn		33.7 (31.5)	O_3N_2	1.7	<u>0.29</u>	<u>Trigonal</u> <u>Bipyramidal</u>	<u>19°</u>	0	1 ()	Co, Zn
A:703	CL	Cl		31.9 (28.5)		N/A	N/A	<u>Free</u>	N/A	N/A	N/A	
B:701	ZN	Zn	1	<u>31.3</u> (36.9)	O ₃ N ₂	<u>2.6</u>	0.074	<u>Trigonal</u> <u>Bipyramidal</u>	13.1°	0	()	Mn, Fe, Zn
B:702	CL	Cl	1	25 (47.5)		N/A	N/A	<u>Free</u>	N/A	N/A	N/A	
Legend:			Not applicable	utlier Bo	<u>rderline</u> A	cceptable						

Column	Description							
Occupancy	Occupancy of ion under consideration							
B factor (env.) ¹	Metal ion B factor, with valence-weighted environmental average B factor in parenthesis							
Ligands	Elemental composition of the coordination sphere							
Valence ²	Summation of bond valence values for an ion binding site. <i>Valence</i> accounts for metal-ligand distances							
	Summation of ligand vectors, weighted by bond valence values and normalized by overall valence. Increase when the coordination sphere is not symmetrical due to incompleteness.							
Geometry ^{1,4}	Arrangement of ligands around the ion, as defined by the NEIGHBORHOOD algorithm							
$\alpha RMSD(0)$	R.M.S. Deviation of observed geometry angles (L-M-L angles) compared to ideal geometry, in degrees							
Vacancy ¹	Percentage of unoccupied sites in the coordination sphere for the given geometry							
ibidentate	Number of residues that form a bidentate interaction instead of being considered as multiple ligands							
Alt. metal	A list of alternative metal(s) is proposed in descending order of confidency, assuming metal environment is accurately determined. This feature is still experimental. It requires user discrimination and cannot be blindly accepted							

Metal-ligand distance distributions for pdb2c6n.ent in comparison with CSD



- (1) Zheng H, Chordia MD, Cooper DR, Chruszcz M, Müller P, Sheldrick GM, Minor W (2014) *Nature Protocols*, 9(1), 156-70.
- (2) Brown ID (2009) Chem. Rev., 109, 6858-6919.
- (3) Müller P, Köpke S, Sheldrick GM (2003) Acta Crystallogr. D Biol. Crystallogr., 59, 32-37.
- (4) Kuppuraj G, Dudev M, Lim C (2009) J. Phys. Chem. B, 113, 2952-2960.
- (5) CSD: Cambridge Structural Database

Maintained by: Heping Zheng <<u>dust@iwonka.med.virginia.edu</u>>

Citing CheckMyMetal (CMM):

Validation of metal-binding sites in macromolecular structures with the CheckMyMetal web server. Zheng, H., Chordia, M.D., Cooper, D.R., Chruszcz, M., Müller, P., Sheldrick, G.M., Minor, W. (2014) Nature Protocols, 9(1), 156-70.