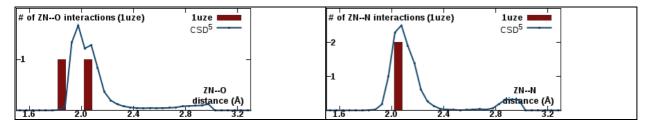
## **CheckMyMetal(CMM)** report for PDB code: 1uze

PDB title: Complex of the anti-hypertensive drug enalaprilat and the human testicular angiotensin i-converting enzyme (1.8Å)

ID	Res.	Metal	Occupancy	B factor (env.) <sup>1</sup>	Ligands	Valence <sup>2</sup>	nVECSUM <sup>3</sup>	Geometry <sup>1,4</sup>	gRMSD(°) <sup>1</sup>	Vacancy <sup>1</sup>	Bidentate	Alt. metal
A:701	ZN	Zn	1	15.3 (13.8)	$O_2N_2$	1.8	<u>0.2</u>	Tetrahedral	11.1°	0	0	
A:703	CL	Cl	1	14.8 (16.3)		N/A	N/A	<u>Free</u>	N/A	N/A	N/A	
A:704	CL	Cl	1	14.3 (12.7)		N/A	N/A	<u>Free</u>	N/A	N/A	N/A	
Legend:			Not applicable Outlier Borderline Acceptable									

Column	Description							
Occupancy	Occupancy of ion under consideration							
B factor (env.) <sup>1</sup>	Metal ion B factor, with valence-weighted environmental average B factor in parenthesis							
Ligands	Elemental composition of the coordination sphere							
IV2IAnca4	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 <sup>1,4</sup>	Arrangement of ligands around the ion, as defined by the NEIGHBORHOOD algorithm							
	R.M.S. Deviation of observed geometry angles (L-M-L angles) compared to ideal geometry, in degrees							
Vacancy <sup>1</sup>	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 pdb1uze.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 < dust@iwonka.med.virginia.edu >

## 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.