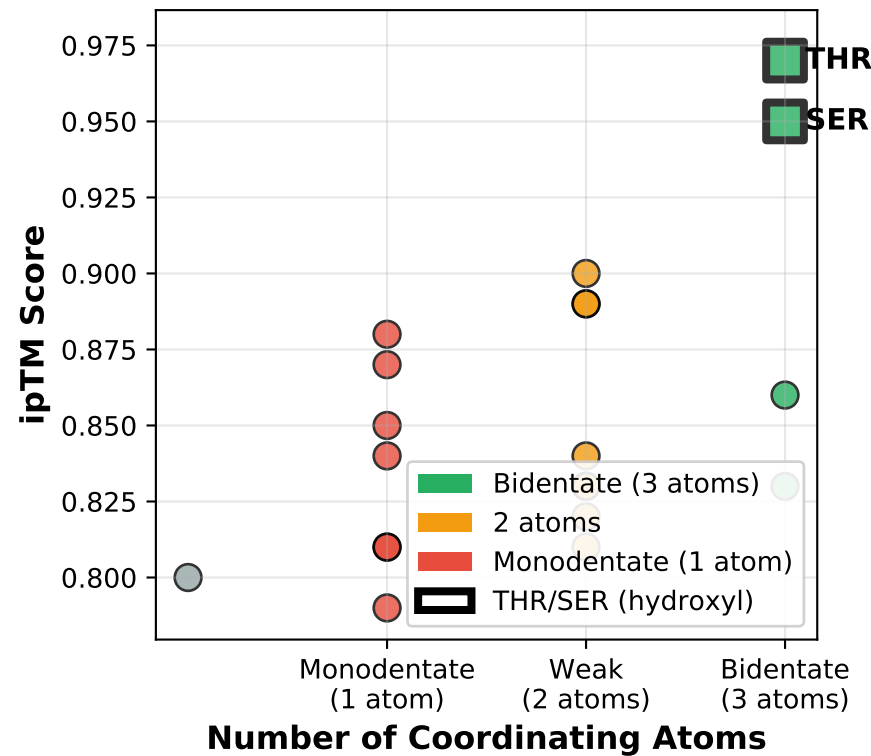
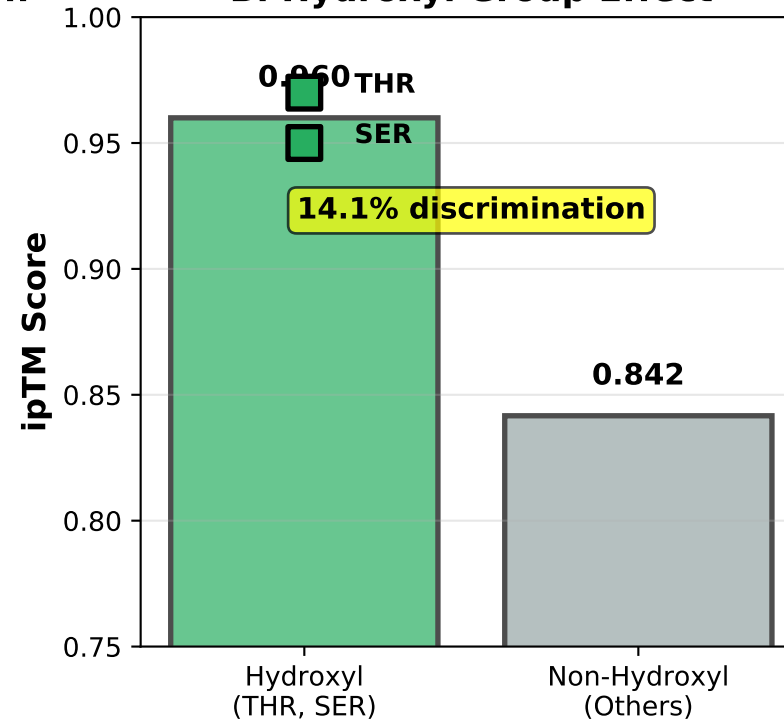


# The Hydroxyl Mechanism: -OH Groups Enable Bidentate Zn<sup>2+</sup> Coordination

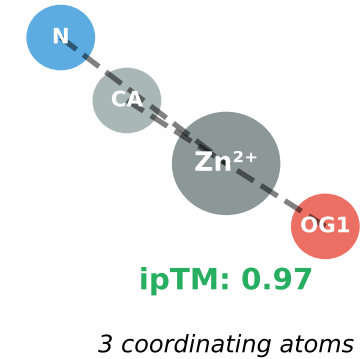
## A. Bidentate vs Monodentate Coordination



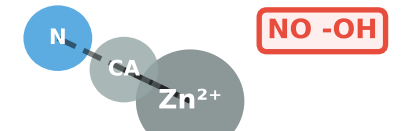
## B. Hydroxyl Group Effect



## THR: Bidentate Coordination



## ILE: Monodentate Coordination



## D. All Amino Acids Ranked by ipTM (Modern ThrRS + Zn)

