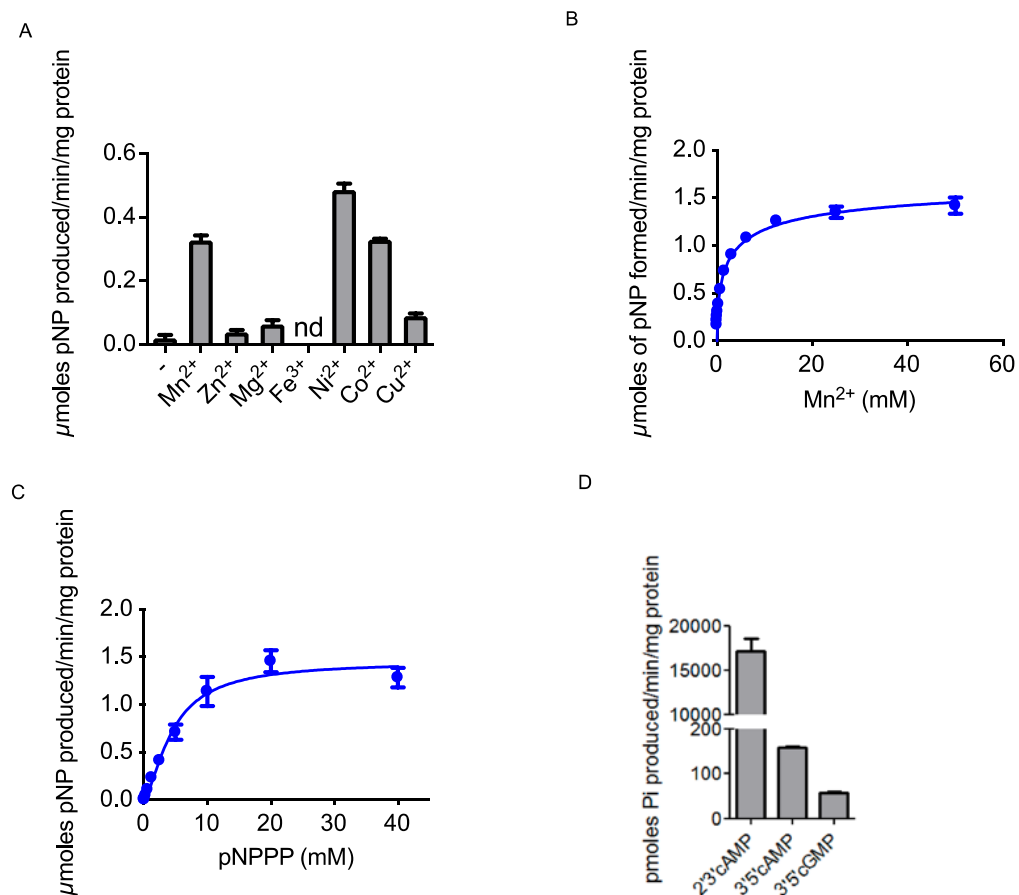


## Biochemical characterization of dMPPED



(A) Activity of dMppd (500 ng) was assayed in the presence of 10 mM pNPPP and 5 mM of the indicated metals. Values represent the mean  $\pm$  S.D. of duplicate determinations carried out using two independent protein preparations. (B) dMppd (500 ng) was assayed in the presence of 30 mM pNPPP and varying concentrations of Mn<sup>2+</sup>. Values represent the mean  $\pm$  S.D. of duplicate determinations, carried out using two independent protein preparations. (C) dMppd (500 ng) was assayed in the presence of 5 mM Mn<sup>2+</sup> and indicated concentrations of pNPPP. Values represent the mean  $\pm$  S.D. of duplicate determinations using two independent protein preparations. (D) Assays were performed with dMppdD (5  $\mu$ g) in the presence of 1 mM 2'3' or 3'5' cAMP or 5 mM 3', 5' cGMP and 5 mM Mn<sup>2+</sup>. Free inorganic phosphate released from either 2', 3' or 5' AMP formed following phosphodiesterase-mediated hydrolysis of the cyclic nucleotides was measured by the malachite green assay.