XPT1 encodes xanthine phosphoribosyltransferase, an enzyme involved in the salvage pathway of purine nucleotide biosynthesis. Xpt1p catalyzes the conversion of 5-phospho-ribosyl-pyrophosphate plus the purine base xanthine to XMP. Xpt1p is 56% identical to the hypoxanthine-guanine phosphoribosyltransferase Hpt1p and overexpression of XPT1 partially rescues cells lacking Hpt1p activity, suggesting that Xpt1p can also use hypoxanthine as a substrate. In xpt1 null mutants, if the de novo pathway of guanine nucleotide biosynthesis is blocked, either through mutation of ade2 or by the addition of mycophenolic acid, cells are unable to grow even with the addition of xanthine to the media.