PTPRD (protein tyrosine phosphatase receptor type delta) is associated with restless legs syndrome.

We identified association of restless legs syndrome (RLS) with PTPRD at 9p23-24 in 2,458 affected individuals and 4,749 controls from Germany, Austria, Czechia and Canada. Two independent SNPs in the 5' UTR of splice variants expressed predominantly in the central nervous system showed highly significant P values (rs4626664, P(nominal/lambda corrected) = 5.91 x 10(-10), odds ratio (OR) = 1.44; rs1975197, P(nominal/lambda corrected) = 5.81 x 10(-9), OR = 1.31). This work identifies PTPRD as the fourth genome-wide significant locus for RLS.