

Title: Hypokalemic Periodic Paralysis *GeneReview* Table 2

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Note: The following information is provided by the authors listed above and has not been reviewed by *GeneReviews* staff.

Table 2. Summary of Mutations Detection Frequencies by Method for Molecular Genetic Testing of Hypokalemic Periodic Paralysis

Gene	Test Method	Mutations Detected	Mutation Detection Frequency by Mutation and Test Method
<i>CACNA1S</i>	Targeted mutation analysis	p.Arg528His p.Arg528Gly p.Arg897Ser p.Val876Glu p.Arg900Ser p.Arg900Gly p.His916Gln p.Arg1239His p.Arg1239Gly	~35% <1% <1% private (one family) <1% <1% private (one family) ~20% <2%
<i>SCN4A</i>	Targeted mutation analysis	p.Arg222Trp p.Arg669His p.Arg672His p.Arg672Gly p.Arg672Ser p.Arg672Cys p.Arg1129Gln p.Arg1132Gln p.Arg1135His	<1% <2% ~10% <2% <1% <1% private (one family) <2% <2%
<i>CACNA1S</i>	Sequence analysis of select exons (e.g. exons 4, 11, 21 and 30 encoding S4 helixes)	See <i>CACNA1S</i> above	~60%
<i>SCN4A</i>	Sequence analysis of select exons (e.g. exons 5, 12, 13, 18 and 24 encoding S4 helixes)	See <i>SCN4A</i> above; Also detects mutations associated with other types of periodic paralysis associated with <i>SCN4A</i> (HYPP, NormoPP)	~20%

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<i>CACNA1S</i>	Sequence analysis	See <i>CACNA1S</i> above	~60%
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<i>KCNJ18</i>	Targeted mutation analysis	c.127C>T p.Arg43Cys c.419C>T p.Thr140Met c.428delC p.Ile144SerfsTer8 c.502G>A p.Val168Met c.598G>C p.Ala200Pro c.1195C>T p.Arg399Ter c.1219C>T p.Gln407Ter c.1061C>T p.Thr354Met c.1097A>G p.Lys366Arg	1/60 cases (s-HOKPP) 1/30 cases (TPP) 1/30 cases (TPP) 2/120 cases (TPP) 1/60 cases (s-HOKPP) 1/30 cases (TPP) 5/30 cases (TPP) 1/30 cases (TPP) 1/30 cases (TPP)
<i>KCNJ18</i>	Sequence analysis	See <i>KCNJ18</i> above	Between 1.5 and 33% (TPP) 3.5% (s-HOKPP)

s-HOKPP = sporadic hypokalemic periodic paralysis
TPP = thyrotoxic hypokalemic periodic paralysis