



**S2 Fig** Expression of Nav1.9-3x FLAG (wild-type, R222S, and R222H) in ND7/23 cells.

(A) Nav1.9-3xFLAG immunoreactivity is shown in red, with positive reactivity in Nav1.9-overexpressing ND7/23 cells at the membrane surface. Scale bar: 10  $\mu$ m. (B) Expression levels of Nav1.9-3xFLAG (wild-type [WT], R222S, and R222H) in ND7/23 cells. Low WT indicates another Nav1.9 (WT)-overexpressing ND7/23 cell clone with lower expression. Expression levels were not significantly different in WT, R222S, and R222H cells ( $p > 0.38$ ). (C) There was no significant difference in current amplitude and voltage dependency in expression levels of Nav1.9-3x FLAG (low WT;  $n = 4$ , WT;  $n = 5$ ). Control: ND7/23 cells without Nav1.9 transfection