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Influence of Point Mutation onto Cardiac Kir2.1 Channel

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The inward rectifier potassium (Kir) channel is a simplified form of voltage gated potassium channel. It consists of seven subfamilies, Kir1 - Kir7. Among them, Kir2.1 encoded by the KCNJ2 gene is widely distributed in heart, nerve, muscle and other cells, regulating resting cell membrane potential and excitability of cells[3]. It is known that genetic diseases such as short QT interval syndrome and Alndersen's syndrome, as well as heart diseases such as atrial fibrillation and heart failure are related to Kir2.1[1,2]. Therefore, we artificially introduce known point mutation that always occur naturally in Kir2.1 ion channels to understand the influence of mutations on the structure and function.

References

1) [U+5B59][U+5A1F][U+FF0C][U+51AF][U+8273][U+FF0C][U+6BDB][U+5C71].[U+5FC3][U+808

2) [U+4F59][U+5143][U+52CB][U+FF0C][U+80E1][U+73B2][U+73B2][U+FF0C][U+4F59][U+56F

3) [U+4F59][U+5143][U+52CB][U+FF0C][U+738B][U+7231][U+73B2][U+7B49].[U+4E2D][U+56F