

## Voltage-gated potassium channels (K<sub>v</sub>) in GtoPdb v.2021.3

Bernard Attali<sup>1</sup>, K. George Chandy<sup>2</sup>, M. Hunter Giese<sup>3</sup>, Stephan Grissmer<sup>4</sup>, George A. Gutman<sup>2</sup>, Lily Y. Jan<sup>5</sup>, Michel Lazdunski<sup>6</sup>, David Mckinnon<sup>7</sup>, Jeanne Nerbonne<sup>8</sup>, Luis A. Pardo<sup>9</sup>, Gail A. Robertson<sup>10</sup>, Bernardo Rudy<sup>11</sup>, Michael C. Sanguinetti<sup>12</sup>, Walter Stühmer<sup>9</sup>, James S. Trimmer<sup>13</sup> and Xiaoliang Wang<sup>14</sup>

1. Tel Aviv University, Israel
2. University of California Irvine, USA
3. Columbia University, USA
4. Ulm University, Germany
5. University of California San Francisco, USA
6. CNRS Valbonne, France
7. State University of New York at Stony Brook, USA
8. Washington University, USA
9. Max Planck Institute for Experimental Medicine, Germany
10. University of Wisconsin-Madison, USA
11. New York University, USA
12. University of Utah, USA
13. University of California Davis, USA
14. Peking Union Medical College, China

### Abstract

The 6TM family of K channels comprises the voltage-gated K<sub>v</sub> subfamilies, the EAG subfamily (which includes hERG channels), the Ca<sup>2+</sup>-activated Slo subfamily (actually with 7TM, termed BK) and the Ca<sup>2+</sup>-activated SK subfamily. These channels possess a pore-forming  $\alpha$  subunit that comprise tetramers of identical subunits (homomeric) or of different subunits (heteromeric). Heteromeric channels can only be formed within subfamilies (e.g. K<sub>v</sub>1.1 with K<sub>v</sub>1.2; K<sub>v</sub>7.2 with K<sub>v</sub>7.3). The pharmacology largely reflects the subunit composition of the functional channel.

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### Database links

[Voltage-gated potassium channels \(K<sub>v</sub>\)](#)

<https://www.guidetopharmacology.org/GRAC/FamilyDisplayForward?familyId=81>

[Introduction to Voltage-gated potassium channels \(K<sub>v</sub>\)](#)

<https://www.guidetopharmacology.org/GRAC/FamilyIntroductionForward?familyId=81>

## Channels and Subunits

K<sub>v</sub>1.1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=538>

K<sub>v</sub>1.2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=539>

K<sub>v</sub>1.3

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=540>

K<sub>v</sub>1.4

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=541>

K<sub>v</sub>1.5

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=542>

K<sub>v</sub>1.6

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=543>

K<sub>v</sub>1.7

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=544>

K<sub>v</sub>1.8

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=545>

K<sub>v</sub>2.1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=546>

K<sub>v</sub>2.2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=547>

K<sub>v</sub>3.1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=548>

K<sub>v</sub>3.2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=549>

K<sub>v</sub>3.3

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=550>

K<sub>v</sub>3.4

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=551>

K<sub>v</sub>4.1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=552>

K<sub>v</sub>4.2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=553>

K<sub>v</sub>4.3

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=554>

K<sub>v</sub>5.1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=555>

K<sub>v</sub>6.1

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K<sub>v</sub>6.2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=557>

K<sub>v</sub>6.3

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K<sub>v</sub>6.4

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K<sub>v</sub>7.1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=560>

K<sub>v</sub>7.2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=561>

K<sub>v</sub>7.3

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=562>

K<sub>v</sub>7.4

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=563>

K<sub>v</sub>7.5

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=564>

K<sub>v</sub>8.1

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=565>

K<sub>v</sub>8.2

<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=566>

K<sub>v</sub>9.1  
<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=567>  
K<sub>v</sub>9.2  
<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=568>  
K<sub>v</sub>9.3  
<https://www.guidetopharmacology.org/GRAC/ObjectDisplayForward?objectId=569>  
K<sub>v</sub>10.1  
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K<sub>v</sub>11.2  
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K<sub>v</sub>12.2  
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