BiochemAR:
QR code for KscA potassium channel module

QR Code Instructions for Model 1

BiochemAR instructions

1. Find the "Biochemistry AR" app button and click on it.
2. Select "Potassium Channel".
3. Tap the little menu button (gray box with three horizontal lines), and select "Model 1".
4. Aim the camera of your device towards the provided QR code!

What am I seeing?

You are seeing the crystal structure of the KscA potassium channel! Different parts of the channel have been shown in different colors/shown in different representations to highlight some important features. To give you the lay of the land:

Object	Representation	Color
K^+ ions	Spheres	pink
K^+ channel (overall)	Cartoon	gray
Alpha helices lining pore	Cartoon	blue
Residues lining central cavity	Sticks	carbon = yellow oxygen = red nitrogen = blue

How do I manipulate the object?

To rotate:
- Hold the device steady, and turn the QR code in the desired direction, or
- Hold the QR code steady, and turn the device in the desired direction!

To zoom in/out:
- Hold the device steady, and bring the QR code towards or away from you, or
- Hold the QR code steady, and bring the device towards or away from you!

To move left/right:
- Hold the device steady, and slide the QR code to the left or right, or
- Hold the QR code steady, and slide the device to the left or right!

QR Code Instructions for Model 2

BiochemAR instructions

5. Find the "Biochemistry AR" app button and click on it.
6. Select "Potassium Channel".
7. Tap the little menu button (gray box with three horizontal lines), and select "Model 2".
8. Aim the camera of your device towards the provided QR code!

What am I seeing now?

You are now looking at a zoomed in view of the selectivity filter! The majority of the channel has been removed; the TVGYG motifs (remember, there are four because the channel is a tetramer!) has been highlighted as yellow sticks.

Object	Representation	Color
K^+ ions	Spheres	pink
Pore helices	Cartoon	gray
Selectivity filter	Sticks	carbon = yellow oxygen = red nitrogen = blue

How do I manipulate the object?

To rotate:
- Hold the device steady, and turn the QR code in the desired direction, or
- Hold the QR code steady, and turn the device in the desired direction!

To zoom in/out:
- Hold the device steady, and bring the QR code towards or away from you, or
- Hold the QR code steady, and bring the device towards or away from you!

To move left/right:
- Hold the device steady, and slide the QR code to the left or right, or
- Hold the QR code steady, and slide the device to the left or right!