

---

## Summary

|                        |                                   |
|------------------------|-----------------------------------|
| <b>Production Name</b> | KIR3.1 Rabbit Polyclonal Antibody |
| <b>Description</b>     | Rabbit Polyclonal Antibody        |
| <b>Host</b>            | Rabbit                            |
| <b>Application</b>     | IF, WB,                           |
| <b>Reactivity</b>      | Human, Mouse, Rat                 |

## Performance

|                     |  |
|---------------------|--|
| <b>Conjugation</b>  | Unconjugated   |
| <b>Modification</b> | Unmodified   |
| <b>Isotype</b>      | IgG  |
| <b>Clonality</b>    | Polyclonal   |
| <b>Form</b>         | Liquid   |
| <b>Storage</b>      | Store at 4°C short term. Aliquot and store at -20°C long term. Avoid freeze/thaw cycles. |
| <b>Buffer</b>       | Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.02% New type preservative N.       |
| <b>Purification</b> | Affinity purification  |

## Immunogen

|                          |   |
|--------------------------|---|
| <b>Gene Name</b>         | KCNJ3   |
| <b>Alternative Names</b> | KCNJ3; GIRK1; G protein-activated inward rectifier potassium channel 1; GIRK-1; Inward rectifier K(+) channel Kir3.1; Potassium channel; inwardly rectifying subfamily J member 3 |
| <b>Gene ID</b>           | 3760.0  |
| <b>SwissProt ID</b>      | P48549. The antiserum was produced against synthesized peptide derived from human GIRK1/KIR3.1/KCNJ3. AA range: 151-200   |

## Application

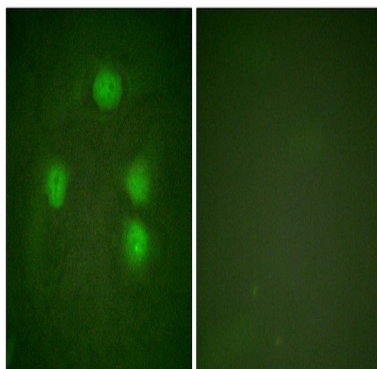
|                         |                                      |
|-------------------------|--------------------------------------|
| <b>Dilution Ratio</b>   | WB 1:500 - 1:2000. IF 1:200 - 1:1000 |
| <b>Molecular Weight</b> | 56kD                                 |

## Background

Potassium channels are present in most mammalian cells, where they participate in a wide range of physiologic responses. The protein encoded by this gene is an integral membrane protein and inward-rectifier type potassium channel. The encoded protein, which has a greater tendency to allow potassium to flow into a cell rather than out of a cell, is controlled by G-proteins and plays an important role in regulating heartbeat. It associates with three other G-protein-activated potassium channels to form a heteromultimeric pore-forming complex that also couples to neurotransmitter receptors in the brain and whereby channel activation can inhibit action potential firing by hyperpolarizing the plasma membrane. These multimeric G-protein-gated inwardly-rectifying potassium (GIRK) channels may play a role in the pathophysiology of epilepsy, addiction, Down's syndrome, and function: This potassium channel is controlled by G proteins. Inward rectifier potassium channels are characterized by a greater tendency to allow potassium to flow into the cell rather than out of it. Their voltage dependence is regulated by the concentration of extracellular potassium; as external potassium is raised, the voltage range of the channel opening shifts to more positive voltages. The inward rectification is mainly due to the blockage of outward current by internal magnesium. This receptor plays a crucial role in regulating the heartbeat. Similarity: Belongs to the inward rectifier-type potassium channel family. Subunit: Associates with GIRK2, GIRK3 or GIRK4 to form a G-protein activated heteromultimer pore-forming unit. The resulting inward current is much larger.

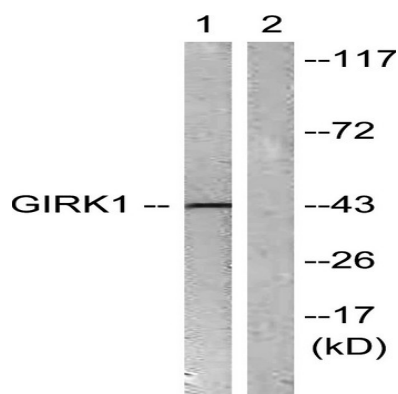
## Research Area

## Image Data

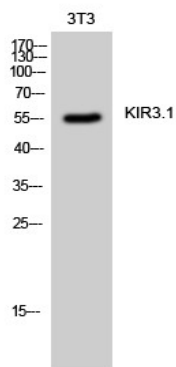


Immunofluorescence analysis of HeLa cells, using GIRK1/KIR3.1/KCNJ3 Antibody. The picture on the right is blocked with the synthesized peptide.

**Product Name: KIR3.1 Rabbit Polyclonal Antibody**  
**Catalog #: APRab13028**



Western blot analysis of lysates from NIH/3T3 cells, using GIRK1/KIR3.1/KCNJ3 Antibody. The lane on the right is blocked with the synthesized peptide.



Western Blot analysis of 3T3 cells using KIR3.1 Polyclonal Antibody

## Note

For research use only.