

## ARG45617 anti-KCNQ2 antibody

Package: 50 µg  
Store at: -20°C

### Summary

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Description | Rabbit Polyclonal antibody recognizes KCNQ2                                                                                                                                                                                                                                                                                                                                                                                      |
| Tested Reactivity   | Hu, Ms, Rat                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Tested Application  | FACS, IHC-P, WB                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Host                | Rabbit                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Clonality           | Polyclonal                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Isotype             | IgG                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Target Name         | KCNQ2                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Species             | Human                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Immunogen           | Recombinant protein containing to human KCNQ2.                                                                                                                                                                                                                                                                                                                                                                                   |
| Conjugation         | Un-conjugated                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Alternate Names     | KCNQ2; Potassium Voltage-Gated Channel Subfamily Q Member 2; KCNA11; Kv7.2; HNSPC; ENB1; BFNC; Potassium Channel, Voltage Gated KQT-Like Subfamily Q, Member 2; Neuroblastoma-Specific Potassium Channel Subunit Alpha KvLQT2; Potassium Voltage-Gated Channel Subfamily KQT Member 2; Voltage-Gated Potassium Channel Subunit Kv7.2; EBN1; EBN; Potassium Voltage-Gated Channel, KQT-Like Subfamily, Member 2; KQT-Like 2; DEE7 |

### Application Instructions

| Application table | Application                                                                                                                                | Dilution                       |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
|                   | FACS                                                                                                                                       | 1 - 3 µg/10 <sup>6</sup> cells |
|                   | IHC-P                                                                                                                                      | 2-5 µg/ml                      |
|                   | WB                                                                                                                                         | 0.25-0.5 µg/ml                 |
| Application Note  | * The dilutions indicate recommended starting dilutions and the optimal dilutions or concentrations should be determined by the scientist. |                                |
| Observed Size     | 97 kDa                                                                                                                                     |                                |

### Properties

|                     |                                                                                                                                                                                                       |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Form                | Liquid                                                                                                                                                                                                |
| Purification        | Affinity purified                                                                                                                                                                                     |
| Buffer              | 0.2% Na <sub>2</sub> HPO <sub>4</sub> , 0.9% NaCl and 4% Trehalose.                                                                                                                                   |
| Stabilizer          | 4% Trehalose                                                                                                                                                                                          |
| Concentration       | 0.5 mg/ml                                                                                                                                                                                             |
| Storage instruction | For continuous use, store undiluted antibody at 2-8°C for up to a week. For long-term storage, aliquot and store at -20°C or below. Storage in frost free freezers is not recommended. Avoid repeated |

freeze/thaw cycles. Suggest spin the vial prior to opening. The antibody solution should be gently mixed before use.

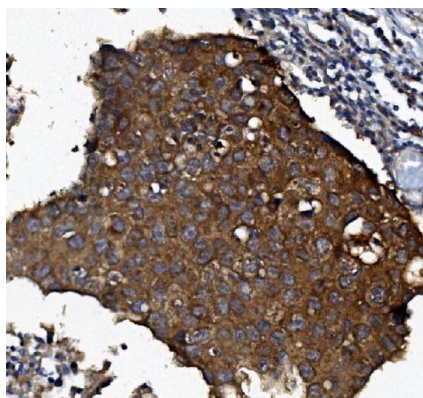
#### Note

For laboratory research only, not for drug, diagnostic or other use.

## Bioinformation

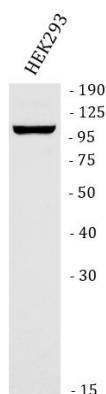
|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Gene Symbol           | KCNQ2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Gene Full Name        | Potassium Voltage-Gated Channel Subfamily Q Member 2                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Background            | The M channel is a slowly activating and deactivating potassium channel that plays a critical role in the regulation of neuronal excitability. The M channel is formed by the association of the protein encoded by this gene and a related protein encoded by the KCNQ3 gene, both integral membrane proteins. M channel currents are inhibited by M1 muscarinic acetylcholine receptors and activated by retigabine, a novel anti-convulsant drug. Defects in this gene are a cause of benign familial neonatal convulsions type 1 (BFNC), also known as epilepsy, benign neonatal type 1 (EBN1). At least five transcript variants encoding five different isoforms have been found for this gene. [provided by RefSeq, Jul 2008] |
| Function              | Pore-forming subunit of the voltage-gated potassium (Kv) M-channel which is responsible for the M-current, a key controller of neuronal excitability. [UniProt]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Calculated Mw         | 96 kDa                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| PTM                   | Phosphoprotein; Ubl conjugation. [UniProt]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| Cellular Localization | Cell membrane. [UniProt]                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

## Images



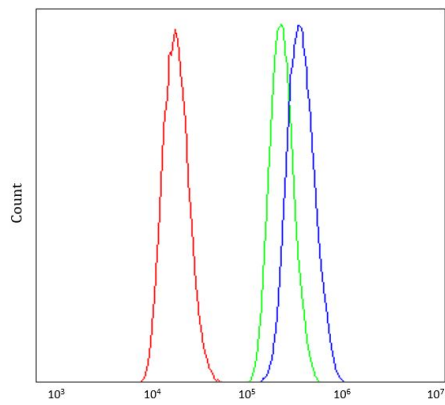
ARG45617 anti-KCNQ2 antibody IHC-P image

Immunohistochemistry: Human breast cancer stained with ARG45617 anti-KCNQ2 antibody at 2 µg/ml dilution.



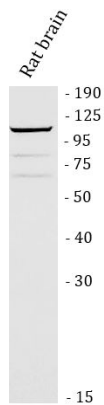
ARG45617 anti-KCNQ2 antibody WB image

Western blot: HEK293 stained with ARG45617 anti-KCNQ2 antibody at 0.5 µg/ml dilution.



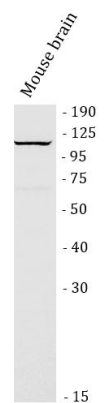
#### ARG45617 anti-KCNQ2 antibody FACS image

Flow Cytometry: 293T stained with ARG45617 anti-KCNQ2 antibody at  $1 \mu\text{g}/10^6$  cells dilution.



#### ARG45617 anti-KCNQ2 antibody WB image

Western blot: Rat brain stained with ARG45617 anti-KCNQ2 antibody at  $0.5 \mu\text{g}/\text{ml}$  dilution.



#### ARG45617 anti-KCNQ2 antibody WB image

Western blot: Mouse brain stained with ARG45617 anti-KCNQ2 antibody at  $0.5 \mu\text{g}/\text{ml}$  dilution.