

For Research Use Only

# Kv4.2 Recombinant antibody, PBS Only (Detector)

Catalog Number: 85133-3-PBS



## Basic Information

Catalog Number:

85133-3-PBS

Concentration:

1 mg/ml

Source:

Rabbit

Isotype:

IgG

Immunogen Catalog Number:

AG15879

GenBank Accession Number:

BC110449

GeneID (NCBI):

3751

UNIPROT ID:

Q9NZV8

Full Name:

potassium voltage-gated channel,  
Shal-related subfamily, member 2

Calculated MW:

630 aa, 71 kDa

Observed MW:

75 kDa

Purification Method:

Protein A purification

CloneNo.:

242754F4

## Applications

Tested Applications:

WB, IHC, IF-P, Cytometric bead array, Indirect ELISA

Species Specificity:

human, mouse

## Background Information

Voltage-gated potassium or Kv channels, specifically those mediating low threshold, rapidly inactivating Ito and IA currents, are known to regulate cardiac and neuronal membrane excitability, respectively (PMID: 12829703). Voltage-gated potassium channel subunit Kv4.2, encoded by the KCND2 gene, belongs to the potassium channel family and D (Shal) subfamily. It is a pore-forming alpha subunit of voltage-gated rapidly inactivating A-type potassium channels. Kv4.2 is highly expressed in the brain (PMID: 10551270). It is a major constituent of A-type potassium currents and a key regulator of neuronal membrane excitability (PMID: 22539834).

## Storage

Storage:

Store at -80°C.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C

Storage Buffer:

PBS only

For technical support and original validation data for this product please contact:

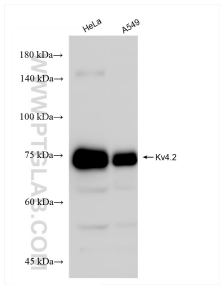
T: 4006900926

E: [Proteintech-CN@ptglab.com](mailto:Proteintech-CN@ptglab.com)

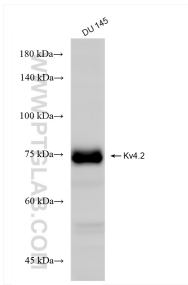
W: [ptgcn.com](http://ptgcn.com)

This product is exclusively available under Proteintech Group brand and is not available to purchase from any other manufacturer.

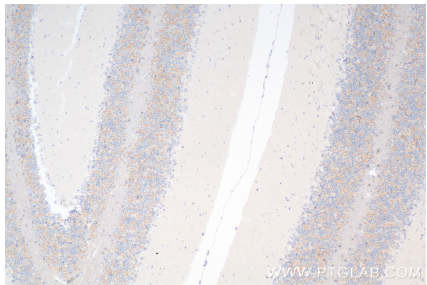
Selected Validation Data



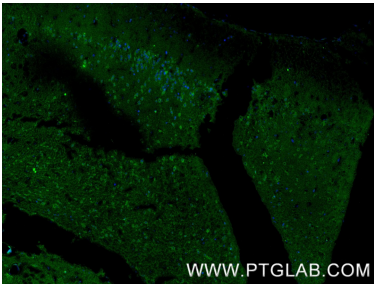
Various lysates were subjected to SDS PAGE followed by western blot with 85133-3-RR (KCND2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85133-3-PBS in a different storage buffer formulation.



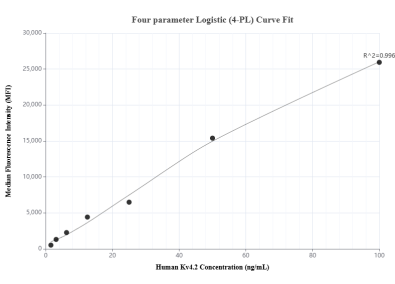
DU 145 cells were subjected to SDS PAGE followed by western blot with 85133-3-RR (KCND2 antibody) at dilution of 1:2000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 85133-3-PBS in a different storage buffer formulation.



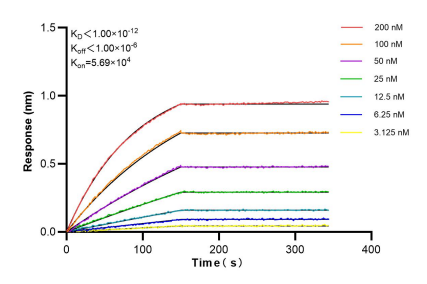
Immunohistochemical analysis of paraffin-embedded mouse cerebellum tissue slide using 85133-3-RR (Kv4.2 antibody) at dilution of 1:4000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85133-3-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using Kv4.2 antibody (85133-3-RR, Clone: 242754F4) at dilution of 1:200 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 85133-3-PBS in a different storage buffer formulation.



Cytometric bead array standard curve of MP01834-2, Kv4.2 Recombinant Matched Antibody Pair, PBS Only. Capture antibody: 85133-4-PBS. Detection antibody: 85133-3-PBS. Standard: Ag15879. Range: 1.563-100 ng/mL.



Bilayer interferometry (BLI) kinetic assays of 85133-3-RR against Human Kv4.2 were performed. The affinity constant is below 1 pM.