For Research Use Only

CoraLite® Plus 488-conjugated Kv4.2 Polyclonal antibody



Purification Method:

IF-P 1:50-1:500

wavelengths: 493 nm / 522 nm

Antigen affinity purification

Excitation/Emission maxima

Recommended Dilutions:

Catalog Number: CL488-21298

Featured Product

Basic Information

Catalog Number: GenBank Accession Number:

CL488-21298 BC110449 GeneID (NCBI): 100ul , Concentration: 1000 $\mu g/ml$ by 3751

Nanodrop: **UNIPROT ID:** Q9NZV8

Rabbit Full Name: Isotype: potassium voltage-gated channel,

Shal-related subfamily, member 2 IgG Immunogen Catalog Number: Calculated MW:

AG15879 630 aa. 71 kDa

Applications

Tested Applications: IF-P, FC (Intra)

Species Specificity: human, mouse, rat

Positive Controls:

IF-P: mouse brain tissue,

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

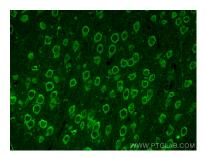
Storage:

Store at -20°C. Avoid exposure to light. Stable for one year after shipment.

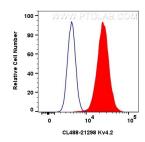
PBS with 50% Glycerol, 0.05% Proclin300, 0.5% BSA, pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse brain tissue using CoraLite® Plus 488 Kv4.2 antibody (CL488-21298) at dilution of 1:200. Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0).



1x10^6 HeLa cells were intracellularly stained with 0.8 ug CoraLite® Plus 488 Anti-Human Kv4.2 (CL488-21298)(red), or 0.8 ug CoraLite® Plus 488-conjugated Rabbit IgG control Rabbit PolyAb (CL488-3000) (blue). Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C).