Anti-CaV2.3 Antibody

ER1803-47

Product Type:	Rabbit polyclonal IgG, primary antibodies
Species reactivity:	Human, Mouse, Rat
Applications:	WB, IF-Cell, IHC-P, FC
Molecular Wt:	Predicted band size: 262 kDa

Description: The R-type calcium channel is a type of voltage-dependent calcium channel. Like the others of this class, the α1 subunit forms the pore through which calcium enters the cell and determines most of the channel's properties. This α1 subunit is also known as the calcium channel, voltage-dependent, R type, alpha 1E subunit (CACNA1E) or Cav2.3 which in humans is encoded by the CACNA1E gene. They are strongly expressed in cortex, hippocampus, striatum, amygdala and interpeduncular nucleus. They are poorly understood, but like Q-type calcium channels, they appear to be present in cerebellar granule cells. They have a high threshold of activation and relatively slow kinetics.

Immunogen: Synthetic peptide within rat CaV23 aa 875-924 / 2,222.

Positive control: Rat brain tissue, human kidney tissue, human placenta tissue, mouse brain tissue, 293T.

Subcellular location: Membrane.

Database links: SwissProt: Q15878 Human | Q61290 Mouse | Q07652 Rat

Recommended Dilutions:

WB	1:500
IF-Cell	1:50-1:200
IHC-P	1:50-1:200
FC	1:50-1:100

Storage Buffer: 1*PBS (pH7.4), 0.2% BSA, 50% Glycerol. Preservative: 0.05% Sodium Azide.

Storage Instruction: Shipped at 4℃. Store at +4℃ short term (1-2 weeks). It is recommended to aliquot into single-use upon delivery. Store at -20℃ long term.

Purity: Immunogen affinity purified.

Images

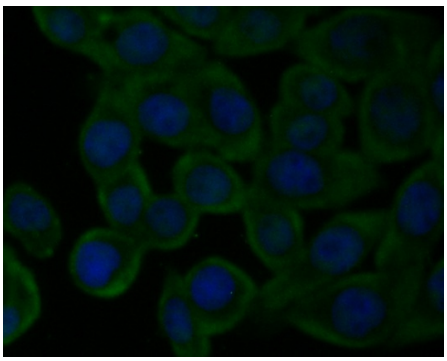

Fig1: ICC staining CaV2.3 in LOVO cells (green). The nuclear counter stain is DAPI (blue). Cells were fixed in paraformaldehyde, permeabilised with 0.25% Triton X100/PBS.

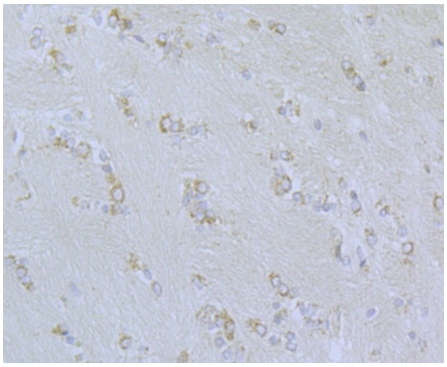

Fig2: Immunohistochemical analysis of paraffin-embedded rat brain tissue using anti-CaV2.3 antibody. Counter stained with hematoxylin.

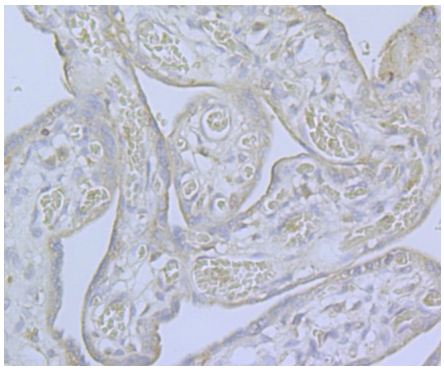

Fig3: Immunohistochemical analysis of paraffin-embedded human placenta tissue using anti-CaV2.3 antibody. Counter stained with hematoxylin.

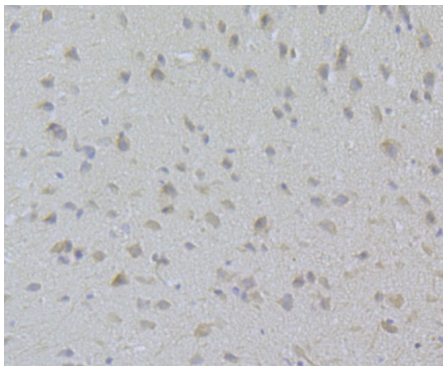

Fig4: Immunohistochemical analysis of paraffin-embedded mouse testis tissue using anti-CaV2.3 antibody. Counter stained with hematoxylin.

Background References

1. Suzuki T et al. Mutations in EFHC1 cause juvenile myoclonic epilepsy. Nat Genet 36:842-849 (2004).
2. Schneider T et al. Molecular analysis and functional expression of the human type E neuronal Ca2+ channel alpha 1 subunit. Recept Channels 2:255-270 (1994).