**Product datasheet**

**Anti-SCN3A antibody ab65164**

1 References  1 Image

**Overview**

**Product name**  Anti-SCN3A antibody  
**Description**  Rabbit polyclonal to SCN3A  
**Host species**  Rabbit  
**Tested applications**  Suitable for: ICC/IF, WB  
**Species reactivity**  Reacts with: Human  
Predicted to work with: Mouse, Rat  
**Immunogen**  Synthetic peptide corresponding to Human SCN3A aa 80-130.

**Properties**

**Form**  Liquid  
**Storage instructions**  Shipped at 4°C. Store at +4°C short term (1-2 weeks). Upon delivery aliquot. Store at -20°C or -80°C. Avoid freeze / thaw cycle.  
**Storage buffer**  Constituent: Whole serum  
**Purity**  Whole antiserum  
**Clonality**  Polyclonal  
**Isotype**  IgG

**Applications**

Our Abpromise guarantee covers the use of ab65164 in the following tested applications.  
The application notes include recommended starting dilutions; optimal dilutions/concentrations should be determined by the end user.

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**Target**
**Function**
Mediates the voltage-dependent sodium ion permeability of excitable membranes. Assuming opened or closed conformations in response to the voltage difference across the membrane, the protein forms a sodium-selective channel through which Na(+) ions may pass in accordance with their electrochemical gradient.

**Sequence similarities**
Belongs to the sodium channel (TC 1.A.1.10) family. Nav1.3/SCN3A subfamily. Contains 1 IQ domain.

**Domain**
The sequence contains 4 internal repeats, each with 5 hydrophobic segments (S1,S2,S3,S5,S6) and one positively charged segment (S4). Segments S4 are probably the voltage-sensors and are characterized by a series of positively charged amino acids at every third position.

**Post-translational modifications**
May be ubiquitinated by NEDD4L; which would promote its endocytosis. Phosphorylation at Ser-1501 by PKC in a highly conserved cytoplasmic loop slows inactivation of the sodium channel and reduces peak sodium currents.

**Cellular localization**
Membrane.

### Images

- **ICC/IF image of ab65164 stained SHSY5Y cells.** The cells were 4% formaldehyde fixed (10 min) and then incubated in 1%BSA / 10% normal goat serum / 0.3M glycine in 0.1% PBS-Tween for 1h to permeabilise the cells and block non-specific protein-protein interactions. The cells were then incubated with the antibody (ab65164, 1/1000 dilution) overnight at +4°C. The secondary antibody (green) was Alexa Fluor® 488 goat anti-rabbit IgG (H+L) used at a 1/1000 dilution for 1h. Alexa Fluor® 594 WGA was used to label plasma membranes (red) at a 1/200 dilution for 1h. DAPI was used to stain the cell nuclei (blue) at a concentration of 1.43µM.

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