

**Nav beta 2 Antibody**  
**NavBeta 2 Antibody, Clone S395-68**  
**Catalog # ASM10317**

**Specification**

**Nav beta 2 Antibody - Product Information**

Application **ICC/IF, WB**  
Primary Accession [Q56A07](#)  
Other Accession [NP\\_001014761.1](#)  
Host **Mouse**  
Isotype **IgG2B**  
Reactivity **Human, Mouse, Rat**  
Clonality **Monoclonal**

**Description**  
Mouse Anti-Mouse Nav beta 2 Monoclonal IgG2B

**Target/Specificity**  
Detects ~40kDa. Does not cross-react with NavBeta1, Navbeta3, or Navbeta4.

**Other Names**  
Sodium channel subunit beta-2 Antibody, Scn2b Antibody, UNQ326/PRO386 Antibody, Gm183 Antibody

**Immunogen**  
Fusion protein amino acids 1-215 (full-length) of mouse NavBeta2

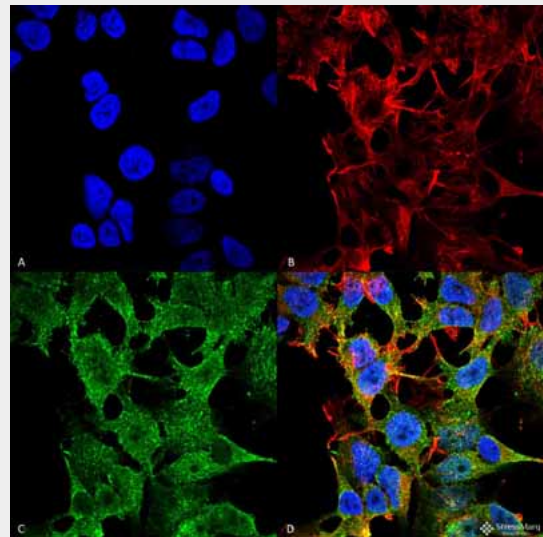
**Purification**  
Protein G Purified

Storage **-20°C**  
**Storage Buffer**  
PBS pH7.4, 50% glycerol, 0.1% sodium azide

Shipping **Blue Ice or 4°C**  
Temperature

**Certificate of Analysis**  
A 1:100 dilution of SMC-485 was sufficient for detection of NavBeta2 in 20 µg of mouse brain lysate by ECL immunoblot analysis using Goat anti-mouse IgG:HRP as the secondary antibody.

**Cellular Localization**  
Membrane

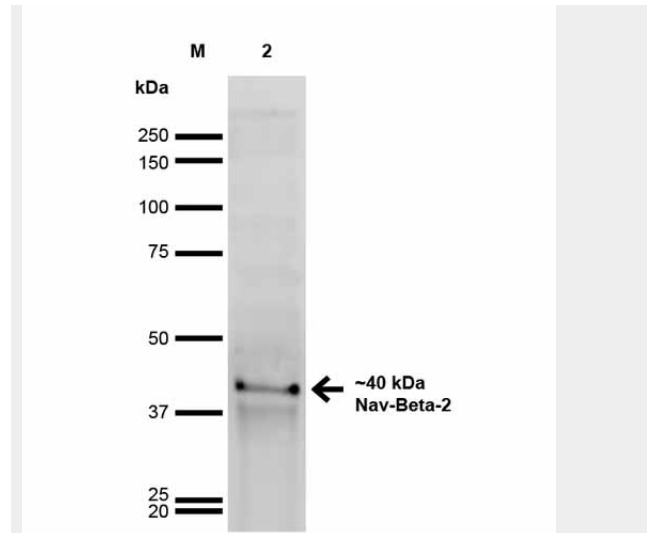


Immunocytochemistry/Immunofluorescence analysis using Mouse Anti-Nav beta 2 Monoclonal Antibody, Clone S395-68 (ASM10317). Tissue: Neuroblastoma cell line (SK-N-BE). Species: Human. Fixation: 4% Formaldehyde for 15 min at RT. Primary Antibody: Mouse Anti-Nav beta 2 Monoclonal Antibody (ASM10317) at 1:100 for 60 min at RT. Secondary Antibody: Goat Anti-Mouse ATTO 488 at 1:100 for 60 min at RT. Counterstain: Phalloidin Texas Red F-Actin stain; DAPI (blue) nuclear stain at 1:1000, 1:5000 for 60min RT, 5min RT. Localization: Membrane. Magnification: 60X. (A) DAPI (blue) nuclear stain (B) Phalloidin Texas Red F-Actin stain (C) Nav beta 2 Antibody (D) Composite.

## Nav beta 2 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)



Western Blot analysis of Rat Brain showing detection of ~40 kDa Nav-Beta-2 protein using Mouse Anti-Nav-Beta-2 Monoclonal Antibody, Clone S395-68 (ASM10317). Lane 1: MW Ladder. Lane 2: Rat Brain. Load: 20 µg. Block: 2% GE Healthcare Blocker for 1 hour at RT. Primary Antibody: Mouse Anti-Nav-Beta-2 Monoclonal Antibody (ASM10317) at 1:1000 for 16 hours at 4°C. Secondary Antibody: Goat Anti-Mouse IgG: HRP at 1:200 for 1 hour at RT. Color Development: ECL solution for 6 min at RT. Predicted/Observed Size: ~40 kDa.

## Nav beta 2 Antibody - Background

NavBeta2 or Scn2B, plays a crucial role in the assembly, expression and functional modulation of the heterotrimeric complex of the sodium channel. The subunit, beta-2 causes an increase in the plasma membrane surface area and in its folding into microvilli. It also interacts with TNR, playing a crucial role in clustering and regulation of activity of sodium channels at the nodes of Ranvier (1, 2). Mutations in this gene have been linked to Brugada syndrome and atrial fibrillation (3).

## Nav beta 2 Antibody - References

1. Genes and mapped phenotypes. (n.d.). Retrieved March 16, 2015, from <http://www.ncbi.nlm.nih.gov/gene/6327>
2. Eubanks J., Srinivasan J., Dinulos M.B., Distech C.M., Catterall W.A. (1997) *Neuroreport*. 8(12): 2775-2779.
3. Riuro H., et al. (2013) *Hum Mutat*. 34(7):

961-966.