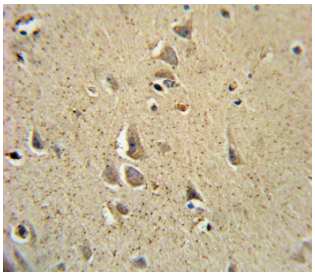
SCN1B Antibody / Sodium channel subunit beta-1 (F55119)

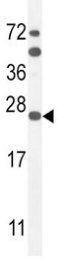
Catalog No.	Formulation	Size
F55119-0.4ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.4 ml
F55119-0.08ML	In 1X PBS, pH 7.4, with 0.09% sodium azide	0.08 ml

Bulk quote request

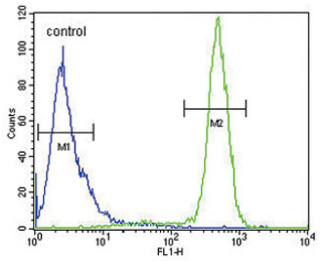
Availability	1-3 business days
Species Reactivity	Human, Mouse
Format	Antigen affinity purified
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit Ig
Purity	Antigen affinity
UniProt	Q07699
Applications	Western Blot : 1:500-1:1000 Immunohistochemistry (FFPE) : 1:10-1:50 Flow Cytometry : 1:10-1:50 per million cells in 0.1ml
Limitations	This SCN1B antibody is available for research use only.



IHC staining of FFPE human brain tissue with SCN1B antibody. HIER: steam section in pH6 citrate buffer for 20 min and allow to cool prior to staining.



Western blot testing of mouse Neuro-2a cell lysate with SCN1B antibody. Predicted molecular weight: 24-30 kDa but can be observed at 30-40 kDa.



Flow cytometry testing of human HeLa cells with SCN1B antibody; Blue=isotype control, Green= SCN1B antibody.

Description

Sodium channel subunit beta-1 (SCN1B) is a protein that is essential for the proper functioning of sodium channels in our cells. Sodium channels are responsible for the movement of sodium ions across cell membranes, playing a vital role in regulating cell excitability and communication. SCN1B is one of several subunits that work together to form functional sodium channels, with each subunit contributing to the overall activity and properties of the channel. One of the key roles of SCN1B is to modulate the activity of sodium channels, influencing their opening and closing dynamics. This modulation is crucial for controlling the flow of sodium ions into cells, which is essential for proper nerve signaling and muscle function. In addition to its role in regulating sodium channel activity, SCN1B also helps to stabilize the structure of sodium channels and promote their trafficking to the cell membrane. Research has shown that mutations in the SCN1B gene can lead to disruptions in sodium channel function, resulting in a variety of neurological and cardiovascular disorders. For example, mutations in SCN1B have been linked to epilepsy, as well as arrhythmias and heart failure.

Application Notes

The stated application concentrations are suggested starting amounts. Titration of the SCN1B antibody may be required due to differences in protocols and secondary/substrate sensitivity.

Immunogen

A portion of amino acids 63-90 from the human protein was used as the immunogen for this SCN1B antibody.

Storage

Store at 4oC for up to one month. For long term, aliquot the SCN1B antibody and store frozen at -20oC or colder. Avoid repeated freeze-thaw cycles.