10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-NAV2 Antibody

Catalog # AP54044

Product Information

Application	WB, IHC, IF/IC
Primary Accession	Q8IVL1
Reactivity	Human, Mouse
Host	Rabbit
Clonality	Polyclonal
Calculated MW	268167

Additional Information

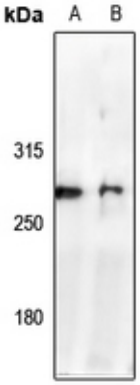
Gene ID	89797
Other Names	HELAD1; KIAA1419; POMFIL2; RAINB1; STEERIN2; Neuron navigator 2; Helicase APC down-regulated 1; Pore membrane and/or filament-interacting-like protein 2; Retinoic acid inducible in neuroblastoma 1; Steerin-2; Unc-53 homolog 2; unc53H2
Target/Specificity	KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human NAV2. The exact sequence is proprietary.
Dilution	WB~~1/500 - 1/1000 IHC~~1/50 - 1/200 IF/IC~~N/A
Format	Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.01% sodium azide.
Storage	Store at -20 °C.Stable for 12 months from date of receipt

Protein Information

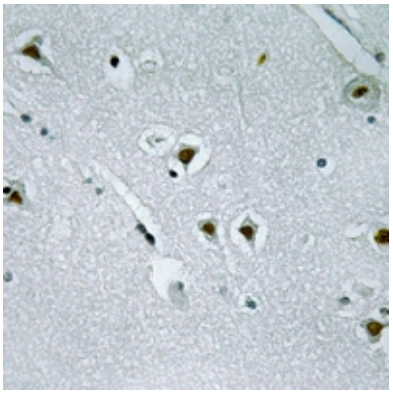
Name	NAV2 {ECO:0000303|PubMed:12079279}
Function	Possesses 3' to 5' helicase activity and exonuclease activity (PubMed:12214280, PubMed:15158073). Involved in cytoskeleton organization (PubMed:35218524). Required for neurite outgrowth in response to stimulation by all-trans retinoic acid (atRA) (PubMed:18726912). Involved in neuronal development, specifically in the development of different sensory organs (PubMed:12214280, PubMed:15158073). Important for brain and cerebellar development (PubMed:35218524). Involved in the differentiation, migration and axonal extension of granule cells in the developing cerebellum (By similarity). Involved in the development of the glossopharyngeal cranial nerve IX and the vagus cranial nerve X, possibly by influencing neuronal cell elongation or survival; influencing the efficiency of the baroreceptor reflex response to changes in blood pressure (By similarity).

Cellular Location	Nucleus. Cytoplasm, cytoskeleton. Cell projection, axon. Perikaryon. Note=Colocalizes with neurofilaments in the perikaryon and the neurites/axons of neuronal cells (PubMed:18726912). Partially colocalizes in a punctate fashion along the length of microtubules (PubMed:18726912)
Tissue Location	Broadly expressed at low levels (PubMed:15158073). Highly expressed in the brain, kidney and liver. Also expressed in the thyroid, mammary gland, spinal cord, heart, placenta and lung Abundantly expressed in colon cancers.

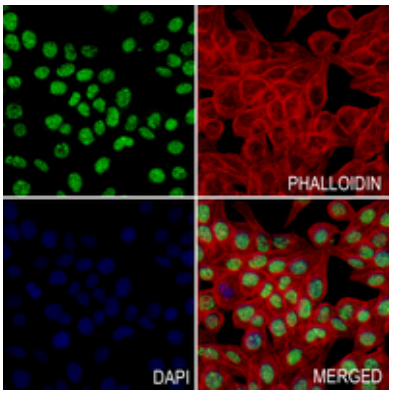
Images



Western blot analysis of NAV2 expression in AML12 (A), U87MG (B) whole cell lysates. (Predicted band size: 268 kD; Observed band size: 268 kD)

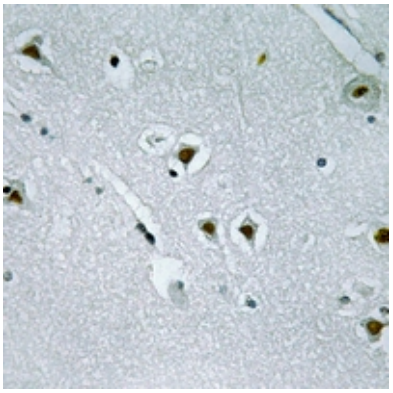


Immunohistochemical analysis of NAV2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.



Immunofluorescent analysis of NAV2 staining in MCF7 cells. Formalin-fixed cells were permeabilized with 0.1% Triton X-100 in TBS for 5-10 minutes and blocked with 3% BSA-PBS for 30 minutes at room temperature. Cells were probed with the primary antibody in 3% BSA-PBS and incubated overnight at 4 °C in a hidified chamber. Cells were washed with PBST and incubated with a AF488-conjugated secondary antibody (green) in PBS at room temperature in the dark. Phalloidin - AF594 was used to stain Actin filaments (red). DAPI was used to stain the cell nuclei (blue).

Immunohistochemical analysis of NAV2 staining in human brain formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with



haematoxylin and mounted with DPX.

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