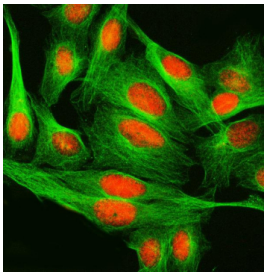
SPRED2 Antibody / Sprouty-related EVH1 domain-containing protein 2 (RQ8930)

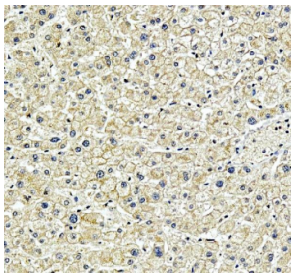
Catalog No.	Formulation	Size
RQ8930	0.5mg/ml if reconstituted with 0.2ml sterile DI water	100 ug

Bulk quote request

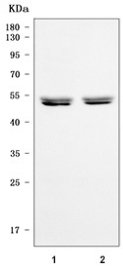
Availability	1-2 business days
Species Reactivity	Human, Mouse, Rat
Format	Antigen affinity purified
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Antigen affinity purified
Buffer	Lyophilized from 1X PBS with 2% Trehalose
UniProt	Q7Z698
Localization	Cytoplasm, nucleus
Applications	Western Blot : 1-2ug/ml Immunohistochemistry (FFPE) : 2-5ug/ml ELISA : 0.1-0.5ug/ml Immunofluorescence : 5ug/ml Flow Cytometry : 1-3ug/million cells
Limitations	This SPRED2 antibody is available for research use only.



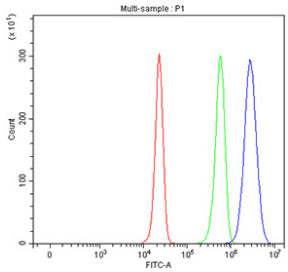
Immunofluorescent staining of FFPE human U-2 OS cells with SPRED2 antibody (red) and Alpha Tubulin mAb (green). HIER: steam section in pH6 citrate buffer for 20 min.



IHC staining of FFPE human liver tissue with SPRED2 antibody, HRP-secondary and DAB substrate. HIER: boil tissue sections in pH8 EDTA for 20 min and allow to cool before testing.



Western blot testing of 1) rat brain and 2) mouse brain tissue lysate with SPRED2 antibody. Predicted molecular weight: 47-48 kDa (two isoforms).



Flow cytometry testing of fixed and permeabilized human HepG2 cells with SPRED2 antibody at 1ug/million cells (blocked with goat sera); Red=cells alone, Green=isotype control, Blue= SPRED2 antibody.

Description

SPRED2 (Sprouty-related EVH1 domain-containing protein 2) is a member of the SPRED protein family, which negatively regulates receptor tyrosine kinase (RTK) signaling pathways. By interacting with components of the Ras/MAPK cascade, SPRED2 suppresses excessive ERK activation, thereby controlling cellular processes such as proliferation, differentiation, and migration. Researchers frequently use a SPRED2 antibody to investigate signaling dynamics and the molecular mechanisms of growth factor regulation.

SPRED2 contains an N-terminal Ena/VASP homology 1 (EVH1) domain, a central c-Kit binding domain, and a C-terminal Sprouty-related cysteine-rich domain. These structural motifs allow SPRED2 to localize to the plasma membrane and recruit signaling proteins, where it inhibits Ras and Raf activation. Employing a SPRED2 antibody allows scientists to study how this protein maintains signaling balance across a variety of cell types.

Altered expression of SPRED2 has been linked to human disease. Loss or reduction of SPRED2 function has been associated with enhanced MAPK pathway activity, which may contribute to oncogenesis and abnormal tissue growth. Additionally, SPRED2 is studied in the context of immune regulation and inflammation, where dysregulated signaling can lead to pathological outcomes. Using a SPRED2 antibody supports research into these processes and offers insight into therapeutic strategies aimed at modulating Ras/MAPK signaling.

NSJ Bioreagents offers a high-quality SPRED2 antibody validated for applications such as western blot, immunohistochemistry, and immunofluorescence. Choosing a SPRED2 antibody from NSJ Bioreagents ensures reliable detection and reproducible performance in studies of signal transduction, cell regulation, and disease biology.

Application Notes

Optimal dilution of the SPRED2 antibody should be determined by the researcher.

Immunogen

Amino acids R40-R298 from the human protein were used as the immunogen for the SPRED2 antibody.

Storage

After reconstitution, the SPRED2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.