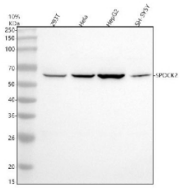
SPOCK2 Antibody / Testican 2 (FY12048)

Catalog No.	Formulation	Size
FY12048	Adding 0.2 ml of distilled water will yield a concentration of 500 ug/ml	100 ug

Bulk quote request

Availability	1-2 days
Species Reactivity	Human
Format	Lyophilized
Host	Rabbit
Clonality	Polyclonal (rabbit origin)
Isotype	Rabbit IgG
Purity	Immunogen affinity purified
Buffer	Each vial contains 4 mg Trehalose, 0.9 mg NaCl, 0.2 mg Na2HPO4.
UniProt	Q92563
Applications	Western Blot : 0.25-0.5ug/ml ELISA : 0.1-0.5ug/ml
Limitations	This SPOCK2 antibody is available for research use only.



Western blot analysis of SPOCK2 using anti-SPOCK2 antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human 293T whole cell lysates, Lane 2: human Hela whole cell lysates, Lane 3: human HepG2 whole cell lysates, Lane 4: human SH-SY5Y whole cell lysates. After electrophoresis, proteins were transferred to a nitrocellulose membrane at 150 mA for 50-90 minutes. Blocked the membrane with 5% non-fat milk/TBS for 1.5 hour at RT. The membrane was incubated with rabbit anti-SPOCK2 antibody at 0.5 ug/ml overnight at 4oC, then washed with TBS-0.1%Tween 3 times with 5 minutes each and probed with a goat anti-rabbit IgG-HRP secondary antibody at a dilution of 1:5000 for 1.5 hour at RT. The signal was developed using an ECL Plus Western Blotting Substrate. The expected band size for SPOCK2 is at 47 kDa but the protein may be observed at higher molecular weights due to glycosylation.

Description

SPOCK2 antibody detects Testican-2, encoded by the SPOCK2 gene. Testican-2 is a secreted extracellular matrix proteoglycan that regulates cell adhesion, migration, and signaling within tissue microenvironments. SPOCK2 antibody

provides researchers with a specific reagent to study extracellular matrix biology, neural development, and cancer progression.

Testican-2 belongs to the testican subfamily of extracellular proteoglycans, which includes SPOCK1 and SPOCK3. Research using SPOCK2 antibody has shown that it contains multiple functional domains, including a follistatin-like domain, an extracellular calcium-binding domain, and protease inhibitor motifs. These features allow it to interact with extracellular enzymes, growth factors, and matrix proteins, thereby influencing tissue architecture and communication.

Studies with SPOCK2 antibody have revealed that Testican-2 regulates extracellular protease activity. By modulating metalloproteinases and serine proteases, it controls extracellular matrix remodeling and cell invasion. This function is particularly relevant in cancer, where SPOCK2 expression influences tumor cell migration and metastasis.

Beyond cancer, Testican-2 contributes to neural and lung development. Research using SPOCK2 antibody has shown that it is expressed in the central nervous system, where it regulates neuronal growth and synapse formation. It is also expressed in the respiratory tract and may regulate branching morphogenesis and airway remodeling. These findings highlight the broad physiological significance of SPOCK2.

Dysregulation of Testican-2 has been associated with lung cancer, gliomas, and other malignancies. Elevated expression correlates with tumor invasiveness and poor prognosis, while reduced expression disrupts neural development. These observations underscore its dual role in health and disease.

SPOCK2 antibody is widely applied in immunohistochemistry, western blotting, and ELISA. Immunohistochemistry reveals localization in tumor and neural tissues, western blotting quantifies levels across development and disease, and ELISA measures soluble protein in biological fluids. These applications make SPOCK2 antibody valuable for extracellular matrix research.

By providing validated SPOCK2 antibody reagents, NSJ Bioreagents supports studies into extracellular proteoglycans, development, and disease. Detection of Testican-2 provides researchers with insight into how secreted matrix proteins regulate tissue remodeling and pathology.

Application Notes

Optimal dilution of the SPOCK2 antibody should be determined by the researcher.

Immunogen

E.coli-derived human SPOCK2 recombinant protein (Position: Y106-D385) was used as the immunogen for the SPOCK2 antibody.

Storage

After reconstitution, the SPOCK2 antibody can be stored for up to one month at 4oC. For long-term, aliquot and store at -20oC. Avoid repeated freezing and thawing.