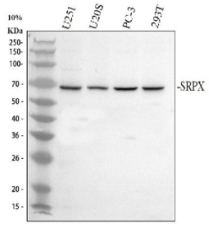
SRPX Antibody / Sushi repeat-containing protein X-linked (FY13310)

Catalog No.	Formulation	Size
FY13310	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	P78539
Applications	Western Blot: 0.25-0.5ug/ml ELISA: 0.1-0.5ug/ml
Limitations	This SRPX antibody is available for research use only.



Western blot analysis of SRPX using anti-SRPX antibody. Electrophoresis was performed on a 10% SDS-PAGE gel at 80V (Stacking gel) / 120V (Resolving gel) for 2 hours. Lane 1: human U251 whole cell lysates, Lane 2: human U2OS whole cell lysates, Lane 3: human PC-3 whole cell lysates, Lane 4: human 293T 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-SRPX 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. A predominant band is detected between an approximately 65 and 70 kDa in all samples, running above the predicted ~52 kDa polypeptide mass but consistent with the higher apparent molecular weight expected for the heavily glycosylated secreted protein SRPX.

Description

SRPX antibody detects Sushi repeat-containing protein X-linked, a secreted and membrane-associated glycoprotein

encoded by the SRPX gene located on chromosome Xq22.1. SRPX is a member of the sushi repeat (also called complement control protein or CCP) family, characterized by tandemly repeated domains that mediate protein-protein interactions involved in immune signaling, cell adhesion, and extracellular matrix organization. The SRPX protein localizes to the extracellular space and plasma membrane, where it participates in cellular communication, angiogenesis, and synaptic remodeling.

SRPX antibody identifies a multifunctional protein expressed in various tissues, including the brain, lung, and vascular endothelium. Within the extracellular environment, SRPX acts as an adhesion molecule that facilitates interactions between cells and matrix components. It is upregulated during wound healing and tissue remodeling, suggesting a role in extracellular matrix turnover and endothelial migration. SRPX contains three sushi domains, an N-terminal signal peptide, and glycosylation sites that support secretion and stability in the extracellular milieu.

In the nervous system, SRPX contributes to synapse formation and refinement. A related paralog, SRPX2, has been implicated in synaptic development and language-associated brain disorders, suggesting possible functional overlap within this protein family. SRPX also interacts with urokinase-type plasminogen activator receptor (uPAR) and complement components, supporting its role in both immune regulation and neurodevelopment. The presence of sushi domains links SRPX to complement control proteins that regulate immune activation and inflammation. Functional studies suggest that SRPX can influence cell migration, angiogenic responses, and matrix protease activity, making it relevant in vascular biology and tumor progression.

Clinically, altered SRPX expression has been observed in cancer, where it may contribute to tumor angiogenesis and metastasis. Overexpression has been reported in certain carcinomas, whereas decreased expression may impair extracellular signaling and cell adhesion. SRPX mutations have been studied in relation to X-linked intellectual disability and speech delay, although functional evidence remains limited. The SRPX gene resides in a genomic region frequently associated with inherited neurological disorders and may have regulatory overlap with neighboring genes involved in synaptic signaling.

From a structural standpoint, SRPX shares sequence homology with complement control proteins and contains conserved cysteine residues essential for disulfide bond formation. Its extracellular localization allows it to function as a scaffold in tissue remodeling and immune recognition. The protein family classification places SRPX among sushi domain-containing adhesion molecules, emphasizing its dual role in immune defense and neuronal plasticity.

Immunohistochemical analysis using SRPX antibody demonstrates extracellular and membrane-associated localization in endothelial cells, neurons, and epithelial tissues. The SRPX antibody from NSJ Bioreagents provides a useful reagent for studying sushi repeat proteins, angiogenesis, and cell-matrix interactions relevant to both neural and vascular biology.

Application Notes

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

Immunogen

E.coli-derived human SRPX recombinant protein (Position: E40-T464) was used as the immunogen for the SRPX antibody.

Storage

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

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