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SRPX2 Polyclonal Antibody

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP54691

Product Information

Application	WB, IHC-P, IHC-F, IF, ICC, E
Primary Accession	O60687
Reactivity	Rat
Host	Rabbit
Clonality	Polyclonal
Calculated MW	52972
Physical State	Liquid
Immunogen	KLH conjugated synthetic peptide derived from human SRPX2
Epitope Specificity	121-220/465
Isotype	IgG
Purity	affinity purified by Protein A
Buffer	0.01M TBS (pH7.4) with 1% BSA, 0.02% Proclin300 and 50% Glycerol.
SUBCELLULAR LOCATION	Cytoplasm. Secreted.
SIMILARITY	Contains 1 HYR domain. Contains 3 Sushi (CCP/SCR) domains.
SUBUNIT	Interacts with ADAMTS4, CTSB and PLAUR. Interacts with PLAUR (via the UPAR/Ly6 domains).
DISEASE	Defects in SRPX2 are a cause of bilateral perisylvian polymicrogyria (BPP) [MIM:300388]. BPP is the most common form of polymicrogyria, a malformation of the cortex, in which the brain surface is irregular and the normal gyral pattern replaced by multiple small, partly fused, gyri separated by shallow sulci. BPP results in mild mental retardation, epilepsy and pseudobulbar palsy, causing difficulties with expressive speech and feeding. Defects in SRPX2 are a cause of rolandic epilepsy with speech dyspraxia and mental retardation X-linked (RESDX) [MIM:300643]. A condition characterized by the association of rolandic seizures with oral and speech dyspraxia, and mental retardation. Rolandic occur during a period of significant brain maturation. During this time, dysfunction of neural network activities such as focal discharges may be associated with specific developmental disabilities resulting in specific cognitive impairments of language, visuo-spatial abilities or attention.
Important Note	This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Background Descriptions	SRPX2 is a 465 amino acid secreted protein expressed in neurons of the brain, including the rolandic area. It has been suggested that SRPX2 enhances cell motility, migration and adhesion through FAK signaling in gastric and other cancer cells. Localized to the cytoplasm, SRPX2 is a ligand for uPAR (urokinase plasminogen activator), a receptor that is a crucial component of the extracellular plasminogen proteolysis system. SRPX2 may be responsible for rolandic seizures (RSs) associated with oral and speech dyspraxia and mental retardation (MR). The involvement of SRPX2 in these disorders suggests an important role for SRPX2 in the perisylvian region critical for language and cognitive development.

Additional Information

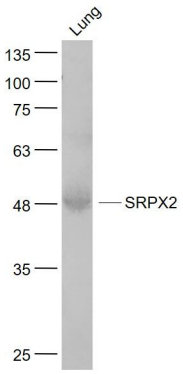
Gene ID	27286
Other Names	Sushi repeat-containing protein SRPX2, Sushi-repeat protein upregulated in leukemia, SRPX2, SRPUL
Target/Specificity	Expressed in neurons of the rolandic area of the brain (at protein level). Highly expressed in the brain, placenta, lung, trachea, uterus and adrenal gland. Weakly expressed in the peripheral blood, brain and bone marrow. Expressed in numerous cancer cell lines.
Dilution	WB=1:500-2000,IHC-P=1:100-500,IHC-F=1:100-500,ICC=1:100-500,IF=1:100-500,ELISA=1:5000-10000
Format	0.01M TBS(pH7.4) with 1% BSA, 0.09% (W/V) sodium azide and 50% Glyce
Storage	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. When reconstituted in sterile pH 7.4 0.01M PBS or diluent of antibody the antibody is stable for at least two weeks at 2-4 °C.

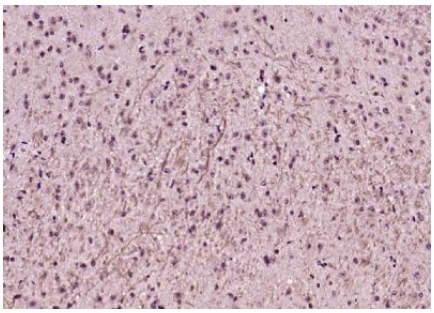
Protein Information

Name	SRPX2
Synonyms	SRPUL
Function	Acts as a ligand for the urokinase plasminogen activator surface receptor. Plays a role in angiogenesis by inducing endothelial cell migration and the formation of vascular network (cords). Involved in cellular migration and adhesion. Increases the phosphorylation levels of FAK. Interacts with and increases the mitogenic activity of HGF. Promotes synapse formation. May have a role in the perisylvian region, critical for language and cognitive development.
Cellular Location	Secreted. Cytoplasm. Cell surface. Synapse
Tissue Location	Expressed in neurons of the rolandic area of the brain (at protein level). Highly expressed in the brain, placenta, lung, trachea, uterus, adrenal gland, heart, ovary and placenta. Weakly expressed in the peripheral blood, brain and bone marrow. Expressed in numerous cancer cell lines and in gastrointestinal cancer cells. Higher levels found in colorectal cancers than in normal colonic mucosa

Images

Sample:
Lung (Mouse) Lysate at 40 ug
Primary: Anti- SRPX2 (AP54691) at 1/1000 dilution
Secondary: IRDye800CW Goat Anti-Rabbit IgG at 1/20000 dilution
Predicted band size: 50 kD
Observed band size: 48 kD





Paraformaldehyde-fixed, paraffin embedded (mouse brain); Antigen retrieval by boiling in sodium citrate buffer (pH6.0) for 15min; Block endogenous peroxidase by 3% hydrogen peroxide for 20 minutes; Blocking buffer (normal goat serum) at 37°C for 30min; Antibody incubation with (SRPX2) Polyclonal Antibody, Unconjugated (AP54691) at 1:200 overnight at 4°C, followed by operating according to SP Kit(Rabbit) (sp-0023) instructionsand DAB staining.