SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-Caspr2 antibody

SL11129R

Product Name:	Caspr2
Chinese Name:	轴突相关CNTP2蛋白抗体(少突胶质细胞)
Alias:	Cell recognition molecule Caspr2; Cntnap2; CNTP2; CNTP2_HUMAN; Contactin-associated protein-like 2.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Rat,
Applications:	WB=1:500-2000ELISA=1:500-1000Flow-Cyt=3ug/Test not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	145kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human Caspr2:801-900/1331<Extracellular>
Lsotype:	IgG
Purification:	affinity purified by Protein A
Storage Buffer:	0.01M TBS(pH7.4) with 1% BSA, 0.03% Proclin300 and 50% Glycerol.
Storage:	Store at -20 °C for one year. Avoid repeated freeze/thaw cycles. The lyophilized antibody is stable at room temperature for at least one month and for greater than a year when kept at -20°C. 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.
PubMed:	PubMed
Product Detail:	CASPR is a transmembrane glycoprotein of the neurexin superfamily that is highly enriched in regions of myelinated axons. The axons of myelinated nerves in the adult nervous system possess specialized subcellular structures essential for efficient and rapid action potential propagation. CASPR and the closely related molecule CASPR2, a mammalian homolog of Drosophila Neurexin IV (Nrx-IV), demarcate distinct subdomains in myelinated axons. While CASPR is present at the paranodal junctions,

CASPR2 is precisely colocalized with Shaker-like K+ channels in the juxtaparanodal region. CASPR2 specifically associates with Kv1.1, Kv1.2, and their Kvbeta2 subunit. CASPR family members may play a role in the local differentiation of the axon into distinct functional subdomains.

Function:
May play a role in the formation of functional distinct domains critical for saltatory conduction of nerve impulses in myelinated nerve fibers. Seems to demarcate the juxtaparanodal region of the axo-glial junction.

Subunit:
Associates with KCNA2.

Subcellular Location:
Membrane.

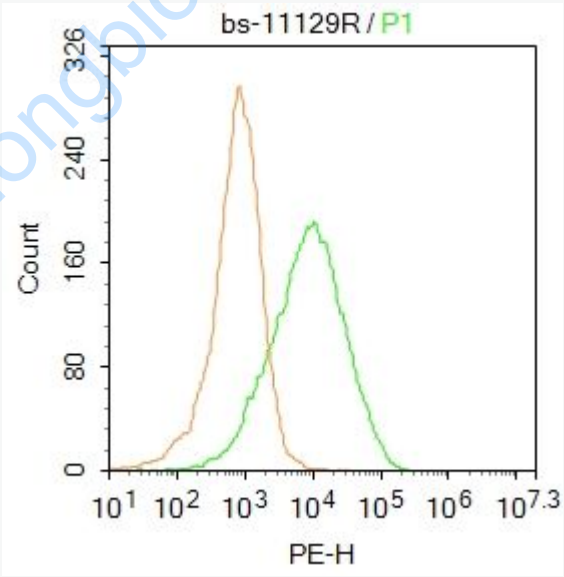
Tissue Specificity:
Predominantly expressed in nervous system.

DISEASE:
Defects in CNTNAP2 are the cause of cortical dysplasia-focal epilepsy syndrome (CDFES) [MIM:610042]. Affected individuals manifest cortical dysplasia, focal epilepsy, relative macrocephaly, and diminished deep-tendon reflexes. Intractable focal seizures begin in early childhood, after which language regression, hyperactivity, impulsive and aggressive behavior, and mental retardation develop.
Genetic variations in CNTNAP2 influences susceptibility to autism type 15 (AUTS15) [MIM:612100]. Autism is a neurodevelopmental disorder characterized by disturbance in language, perception and socialization. The disorder is classically defined by a triad of limited or absent verbal communication, a lack of reciprocal social interaction or responsiveness, and restricted, stereotypical, and ritualized patterns of interests and behavior. Note=A chromosomal aberration involving CNTNAP2 is found in a patient with autism spectrum disorder. Paracentric inversion 46,XY,inv(7)(q11.22;q35). The inversion breakpoints disrupt the genes AUTS2 and CNTNAP2.

Similarity:
Belongs to the neurexin family.
Contains 2 EGF-like domains.
Contains 1 F5/8 type C domain.
Contains 1 fibrinogen C-terminal domain.
Contains 4 laminin G-like domains.

SWISS:
Q9UHC6

Gene ID:
26047

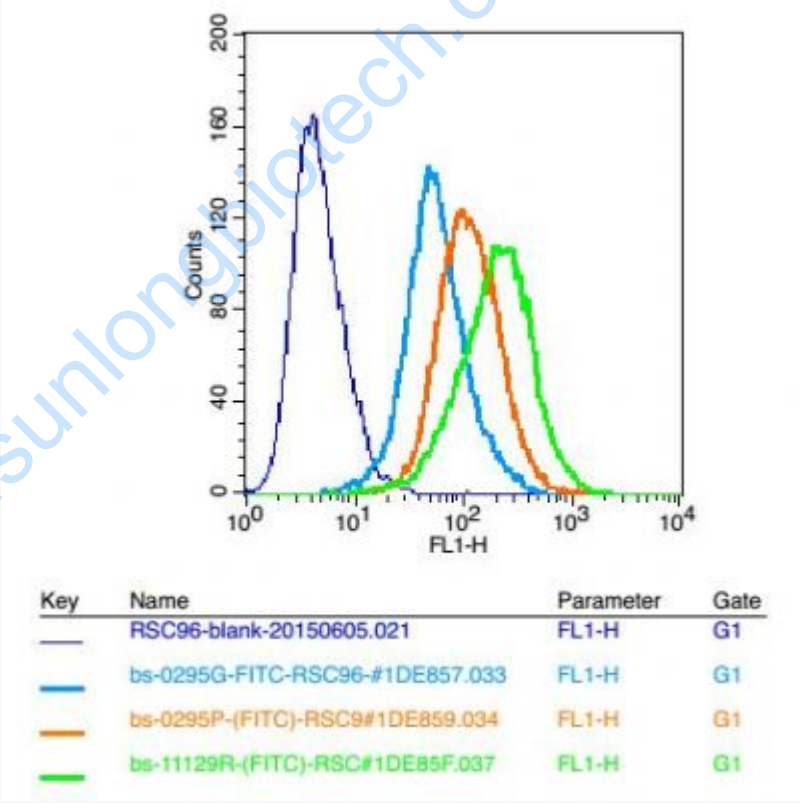
	Database links: Entrez Gene: 26047Human Entrez Gene: 66797Mouse Omim: 604569Human SwissProt: Q9UHC6Human SwissProt: Q9CPW0Mouse Unigene: 655684Human Unigene: 440084Mouse **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Blank control: HepG2. Primary Antibody (green line): Rabbit Anti-Caspr2 antibody (SL11129R) Dilution: 1μg /10^6 cells; Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody : Goat anti-rabbit IgG-PE

Dilution: 1μg /test.

Protocol

The cells then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min at at room temperature .Cells stained with Primary Antibody for 30 min at room temperature. The secondary antibody used for 40 min at room temperature. Acquisition of 20,000 events was performed.



Positive control: RSC96 cells

Concebtration: 5μg/10^6 cells

Incubation conditions: Avoid light , 30 minutes on the ice.