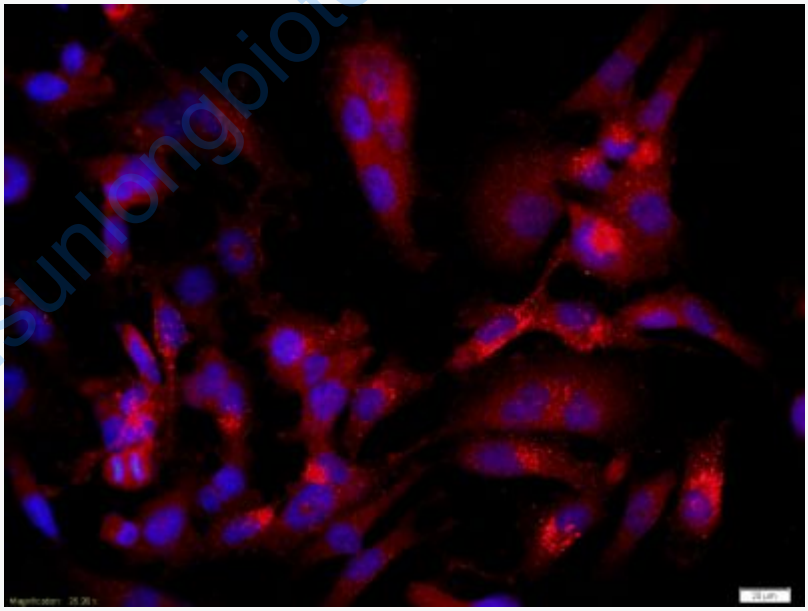
SunLong Biotech Co.,LTD
Tel: 0086-571- 56623320 Fax:0086-571- 56623318
E-mail:sales@sunlongbiotech.com
www.sunlongbiotech.com

Rabbit Anti-CASPR antibody

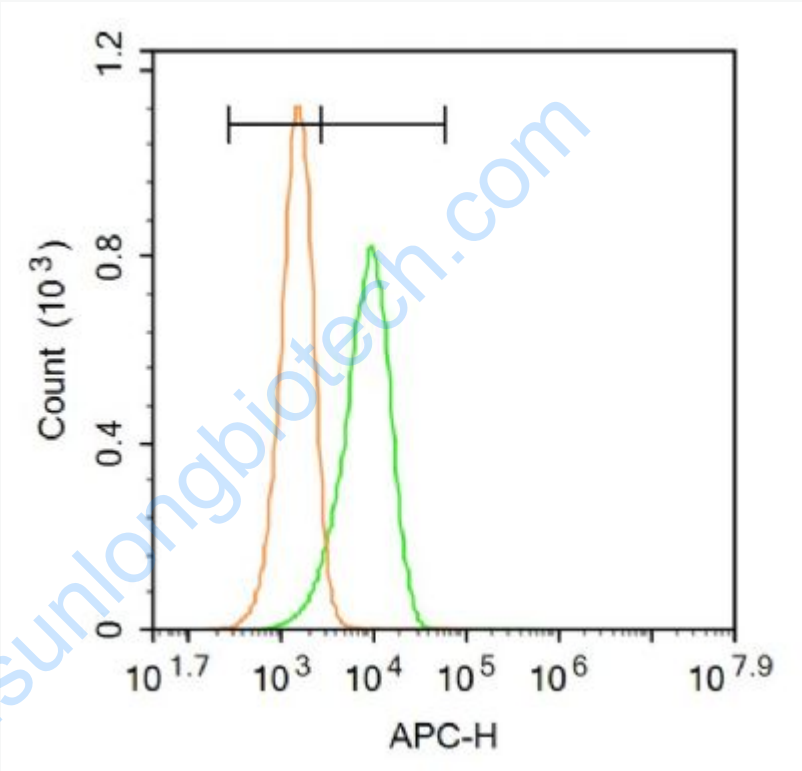
SL11128R

Product Name:	CASPR
Chinese Name:	轴突蛋白4/少突胶质细胞抗体
Alias:	Neurexin4; caspr 1; Caspr; Caspr1; Cntnap 1; Cntnap1; CNTP 1; CNTP1; CNTP1_HUMAN; Contactin associated protein 1; Contactin-associated protein 1; MHDNIV; NCP 1; NCP1; Neurexin 4; Neurexin IV; Neurexin-4; Nrxn 4; Nrxn4; p190; Paranodin.
Organism Species:	Rabbit
Clonality:	Polyclonal
React Species:	Human,Mouse,Rat,Dog,Pig,Cow,Horse,
Applications:	WB=1:500-2000ELISA=1:500-1000IHC-P=1:400-800IHC-F=1:400-800Flow-Cyt=3ug/TestICC=1:100-500IF=1:100-500（Paraffin sections need antigen repair） not yet tested in other applications. optimal dilutions/concentrations should be determined by the end user.
Molecular weight:	154kDa
Cellular localization:	The cell membrane
Form:	Lyophilized or Liquid
Concentration:	1mg/ml
immunogen:	KLH conjugated synthetic peptide derived from human CASPR/Neurexin4:151-250/1384
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:	Neurexins comprise a family of neuronal cell surface proteins, which include neurexin I (NRXN1), neurexin II (NRXN2), neurexin III (NRXN3) and CASPR (neurexin IV). Neurexins I-III are expressed as ? and ∫ isoforms. The ? isoforms are made of three

	cassettes, which contain two LNS (laminin A, neurexins, sex hormone-binding)-domains separated by EGF domains, followed by a transmembrane region and a 55 amino acid cytoplasmic C-terminal. The ? isoforms bind to neurexophilins at the second LNS site, and to the excitatory neurotoxin ?-latrotoxin. The ∫ isoforms have only one LNS-domain, bind to neuroligins and play a role in the formation and remodeling of synapses. CASPR (for contactin-associated protein 1, also designated paranodin in mouse), contains an extracellular domain similar to the other three neurexins, and binds to the surface glycoprotein contactin. CASPR and the closely related CASPR2, a mammalian homolog of Drosophila neurexin IV (Nrx-IV), demarcate distinct subdomains in myelinated axons. Specifically, CASPR exists at the paranodal junctions, while CASPR2 co-localizes with Shaker-like K+ channels in the juxtaparanodal region. CASPR may play a role in the communication of glial cells and neurons during development. **Function:** Seems to 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 paranodal region of the axo-glial junction. In association with contactin may have a role in the signaling between axons and myelinating glial cells. **Subunit:** Interacts with contactin in cis form. **Subcellular Location:** Membrane. **Tissue Specificity:** Predominantly expressed in brain. Weak expression detected in ovary, pancreas, colon, lung, heart, intestine and testis. **Similarity:** Belongs to the neurexin family. **SWISS:** P78357 **Gene ID:** 8506 **Database links:** Entrez Gene: 8506 Human Entrez Gene: 53321 Mouse Entrez Gene: 84008 Rat

	Omim: 602346 Human SwissProt: P78357 Human SwissProt: O54991 Mouse SwissProt: P97846 Rat Unigene: 408730 Human Unigene: 474527 Mouse Unigene: 88654 Rat **Important Note:** This product as supplied is intended for research use only, not for use in human, therapeutic or diagnostic applications.
Picture:	 Tissue/cell: human glioma cells(U251 cells);4% Paraformaldehyde-fixed and paraffin-embedded; Antigen retrieval: citrate buffer (0.01M, pH 6.0), Boiling bathing for 15min; Blocking buffer (normal goat serum,C-0005) at 37℃ for 20 min;

Incubation: Anti-CASPR Polyclonal Antibody, Unconjugated(SL11128R) 1:200, overnight at 4°C; The secondary antibody was Goat Anti-Rabbit IgG, Cy3 conjugated(SL11128R)used at 1:200 dilution for 40 minutes at 37°C. DAPI(5ug/ml,blue,C-0033) was used to stain the cell nuclei



Blank control (Black line): HUVEC (Black).

Primary Antibody (green line): Rabbit CASPR antibody (SL11128R)

Dilution: 1μg /10^6 cells;

Isotype Control Antibody (orange line): Rabbit IgG .

Secondary Antibody (white blue line): Goat anti-rabbit IgG-AF647

Dilution: 1μg /test.

Protocol

	The cells were then incubated in 5%BSA to block non-specific protein-protein interactions for 30 min 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.