Revision 4

#97736 Store at -20C

Caspr (D8I3V) Rabbit mAb

Cell Signaling TECHNOLOGY®

Orders: 877-616-CELL (2355) orders@cellsignal.com

Support: 877-678-TECH (8324)

Web: info@cellsignal.com cellsignal.com

3 Trask Lane | Danvers | Massachusetts | 01923 | USA

For Research Use Only. Not for Use in Diagnostic Procedures.

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB, IP, IF-F	H M R	Endogenous	190	Rabbit IgG	#P78357	8506

Product Usage Information

Application	Dilution
Western Blotting	1:1000
Immunoprecipitation	1:50
Immunofluorescence (Frozen)	1:800

Storage

Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at –20°C. Do not aliquot the antibody.

For a carrier free (BSA and azide free) version of this product see product #59964.

Specificity / Sensitivity

Caspr (D8I3V) Rabbit mAb recognizes endogenous levels of total Caspr protein.

Source / Purification

Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Pro1375 of human Caspr protein.

Background

Contactin-associated protein 1 (Caspr) is a membrane protein that is an essential component of the paranodal junctions in the peripheral and central nervous systems (PNS and CNS, respectively). Caspr is part of the Neurexin family of proteins and is also known as Neurexin IV, Paranodin, and Cntnap1. Caspr forms a complex, via its extracellular domain, with contactin at paranodal junctions of the axon (1, 2). Paranodal junctions are specialized junctions in the axon that are formed between the axolemma and the paranodal loops of myelinating glia. Paranodal structures are critical for salutatory conduction in the PNS and CNS. In the absence of Caspr, Caspr knockout mice exhibit mislocalization of other paranodal junction proteins, including contactin and neurofascin (3). Knockout mice also exhibit reduced nerve conduction velocities, as well as behavior defects consistent with abnormal nerve conduction. Therefore, Caspr is a critical component of a protein complex that is likely central to paranodal junction formation and maintenance.

Background References

1. Einheber, S. et al. (1997) *J Cell Biol* 139, 1495-506.
2. Rios, J.C. et al. (2000) *J Neurosci* 20, 8354-64.
3. Bhat, M.A. et al. (2001) *Neuron* 30, 369-83.

Species Reactivity

Species reactivity is determined by testing in at least one approved application (e.g., western blot).

Western Blot Buffer

IMPORTANT: For western blots, incubate membrane with diluted primary antibody in 5% w/v BSA, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.

Applications Key

WB: Western Blotting **IP:** Immunoprecipitation **IF-F:** Immunofluorescence (Frozen)

Cross-Reactivity Key

H: human **M:** mouse **R:** rat **Hm:** hamster **Mk:** monkey **Vir:** virus **Mi:** mink **C:** chicken **Dm:** D. melanogaster **X:** Xenopus **Z:** zebrafish **B:** bovine **Dg:** dog **Pg:** pig **Sc:** S. cerevisiae **Ce:** C. elegans **Hr:** horse **GP:** Guinea Pig **Rab:** rabbit **All:** all species expected

Trademarks and Patents

Limited Uses

writing by a legally authorized representative of CST, are rejected and are of no force or effect.

Products are labeled with For Research Use Only or a similar labeling statement and have not been approved, cleared, or licensed by the FDA or other regulatory foreign or domestic entity, for any purpose. Customer shall not use any Product for any diagnostic or therapeutic purpose, or otherwise in any manner that conflicts with its labeling statement. Products sold or licensed by CST are provided for Customer as the end-user and solely for research and development uses. Any use of Product for diagnostic, prophylactic or therapeutic purposes, or any purchase of Product for resale (alone or as a component) or other commercial purpose, requires a separate license from CST. Customer shall (a) not sell, license, loan, donate or otherwise transfer or make available any Product to any third party, whether alone or in combination with other materials, or use the Products to manufacture any commercial products, (b) not copy, modify, reverse engineer, decompile, disassemble or otherwise attempt to discover the underlying structure or technology of the Products, or use the Products for the purpose of developing any products or services that would compete with CST products or services, (c) not alter or remove from the Products any trademarks, trade names, logos, patent or copyright notices or markings, (d) use the Products solely in accordance with CST Product Terms of Sale and any applicable documentation, and (e) comply with any license, terms of service or similar agreement with respect to any third party products or services used by Customer in connection with the Products.