

#15413 Store at -20C

**F3/Contactin (D7D4X) Rabbit mAb****Cell Signaling**  
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**For Research Use Only. Not for Use in Diagnostic Procedures.**

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source/Isotype:	UniProt ID:	Entrez-Gene Id:
WB	H M R	Endogenous	140	Rabbit IgG	#Q12860	1272

<b>Product Usage Information</b>	<b>Application</b> Western Blotting	<b>Dilution</b> 1:1000
<b>Storage</b>	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.	
<b>Specificity / Sensitivity</b>	F3/Contactin (D7D4X) Rabbit mAb recognizes endogenous levels of total F3/contactin protein. The antibody detects a 32 kDa protein of unknown identity in some tissue extracts.	
<b>Source / Purification</b>	Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Met774 of human F3/contactin protein.	
<b>Background</b>	F3/contactin (CNTN, contactin 1) is a glycosylphosphatidylinositol (GPI)-anchored neural cell adhesion protein belonging to the immunoglobulin protein superfamily (1). During early mammalian development, F3/contactin is expressed in granule neuronal progenitor (GNP) cells, where it was shown to promote GNP differentiation, in part by antagonizing sonic hedgehog (SHH)-mediated proliferation (2). Biochemical studies have shown that F3/contactin interacts with the phosphatase PTPRZ on the surface of oligodendrocyte precursor cells, an association that was shown to be essential for oligodendrocyte maturation (3). F3/contactin expression is also abundant in post-mitotic neurons, where its functions as a neural cell adhesion protein have been suggested to play an important role in synaptic plasticity and memory (4). Although primarily associated with neuronal development and function, F3/contactin expression has also been implicated in extra-neuronal tumorigenesis. For example, expression of F3/contactin was detected in both primary prostate tumors, and lymph node and bone metastases, while patient tumor samples with detectable F3/contactin expression were associated with tumor progression and reduced recurrence-free survival (5).	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Falk, J. et al. (2002) <i>Biol Cell</i> 94, 327-34.</li> <li>2. Xenaki, D. et al. (2011) <i>Development</i> 138, 519-29.</li> <li>3. Lamprianou, S. et al. (2011) <i>Proc Natl Acad Sci U S A</i> 108, 17498-503.</li> <li>4. Gulisano, W. et al. (2017) <i>Mol Cell Neurosci</i> 81, 64-71.</li> <li>5. Yan, J. et al. (2016) <i>Cancer Res</i> 76, 1603-14.</li> </ol>	
<b>Species Reactivity</b>	Species reactivity is determined by testing in at least one approved application (e.g., western blot).	
<b>Western Blot Buffer</b>	<b>IMPORTANT:</b> For western blots, incubate membrane with diluted primary antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween® 20 at 4°C with gentle shaking, overnight.	
<b>Applications Key</b>	<b>WB:</b> Western Blotting	
<b>Cross-Reactivity Key</b>	<b>H:</b> human <b>M:</b> mouse <b>R:</b> rat <b>Hm:</b> hamster <b>Mk:</b> monkey <b>Vir:</b> virus <b>Mi:</b> mink <b>C:</b> chicken <b>Dm:</b> D. melanogaster <b>X:</b> Xenopus <b>Z:</b> zebrafish <b>B:</b> bovine <b>Dg:</b> dog <b>Pg:</b> pig <b>Sc:</b> S. cerevisiae <b>Ce:</b> C. elegans <b>Hr:</b> horse <b>GP:</b> Guinea Pig <b>Rab:</b> rabbit <b>All:</b> all species expected	
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