

#3919 Store at -20C

## Phospho-PSD95 (Tyr236/Tyr240) Antibody



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

Applications:	Reactivity:	Sensitivity:	MW (kDa):	Source:	UniProt ID:	Entrez-Gene Id:
WB	R	Endogenous	95	Rabbit	#P78352	1742

<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 and 50% glycerol. Store at –20°C. Do not aliquot the antibody.	
<b>Specificity / Sensitivity</b>	Phospho-PSD95 (Tyr236/Tyr240) Antibody detects endogenous levels of PSD95 protein only when phosphorylated at Tyr236 or Tyr240.	
<b>Species predicted to react based on 100% sequence homology:</b>	Human, Mouse	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic phosphopeptide corresponding to residues surrounding Tyr236 and Tyr240 of human PSD95. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	<p>Postsynaptic Density protein 95 (PSD95) is a member of the membrane-associated guanylate kinase (MAGUK) family of proteins. These family members consist of an amino-terminal variable segment followed by three PDZ domains, an SH3 domain, and an inactive guanylate kinase (GK) domain. PSD95 is a scaffolding protein involved in the assembly and function of the postsynaptic density complex (1-2). PSD95 participates in synaptic targeting of AMPA receptors through an indirect manner involving stargazin and related transmembrane AMPA receptor regulatory proteins (TARPs) (3). It is implicated in experience-dependent plasticity and plays an indispensable role in learning (4). Mutations in PSD95 are associated with autism (5).</p> <p>Phospho-PSD95 (Tyr236/Tyr240) Antibody is directed against previously unpublished PSD95 tyrosine phosphorylation sites at Tyr236 and Tyr240 that were identified at Cell Signaling Technology (CST) using PhosphoScan®, CST's MS/MS platform for phosphorylation site discovery. Phosphorylation of PSD95 at Tyr236 and Tyr240 was observed in extracts isolated from ischemic rat brain. The sites were independently found in a large-scale identification of tyrosine phosphorylation sites from murine brain (6).</p>	
<b>Background References</b>	<ol style="list-style-type: none"> <li>1. Cao, J. et al. (2005) <i>J. Cell Biol</i> 168, 117-26.</li> <li>2. Chetkovich, D.M. et al. (2002) <i>J. Neurosci.</i> 22, 6415-25.</li> <li>3. Cai, C. et al. (2006) <i>J. Biol. Chem.</i> 281, 4267-73.</li> <li>4. Yao, W.D. et al. (2004) <i>Neuron</i> 41, 625-38.</li> <li>5. Cline, H. (2005) <i>Curr. Biol.</i> 15, R203-5.</li> <li>6. Ballif, B.A. et al. (2008) <i>J. Proteome Res.</i> 7, 311-8.</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>	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.
<b>Applications Key</b>	<b>WB:</b> Western Blotting

**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

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