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# Homer1 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	H M R	Endogenous	46	Rabbit	#Q86YM7	9456

<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>	Homer1 Antibody detects endogenous levels of total Homer1 protein. This antibody may also detect isoform Homer1c.	
<b>Source / Purification</b>	Polyclonal antibodies are produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Glu130 of human Homer1 protein. Antibodies are purified by protein A and peptide affinity chromatography.	
<b>Background</b>	Homer1, Homer2 and Homer3 are scaffolding proteins, composed of an EVH protein-binding domain, a coiled-coil domain and a leucine zipper domain. The EVH domain is a protein-protein binding module that binds to the proline-rich motifs PPXXF, PPXF, and LPSSP of G protein-coupled receptors (GPCRs), inositol 1,4,5-triphosphate (IP3) receptors (IP3Rs), ryanodine receptors, and TRP channels (1-2). The coiled-coil and the leucine zipper domains cause multimerization of Homers and assemble signaling proteins complexes. The Homer1 gene encodes a short isoform (Homer1a, aa 1-186) and two long isoforms (Homer1b, aa 1-354; Homer1c, aa 1-366). Homer1a lacks the coiled-coil domain and leucine zipper, antagonizing multimerization of Homers and thus disassembling signaling proteins complexes (3).	
<b>Background References</b>	1. Fagni, L. et al. (2002) <i>Sci STKE</i> 2002, re8. 2. Yuan, J.P. et al. (2003) <i>Cell</i> 114, 777-89. 3. Xiao, B. et al. (2000) <i>Curr Opin Neurobiol</i> 10, 370-4.	

<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
<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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