Synaptic Systems

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Homer 1a

Cat.No. 160 013; Polyclonal rabbit antibody, 50 µg specific antibody (lyophilized)

Data Sheet

Reconstitution/ Storage	50 µg specific antibody, lyophilized. Affinity purified with the immunogen. Rabbit serum albumin was added for stabilization. For reconstitution add 50 µl H_2O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	**WB**: 1 : 1000 (AP staining) **IP**: not tested yet **ICC**: not tested yet **IHC**: not recommended **IHC-P/FFPE**: not tested yet
Immunogen	Synthetic peptide corresponding to AA 180 to 186 from rat Homer1a (Q9Z214-3)
Reactivity	Reacts with: rat (Q9Z214-3), mouse. No signal: zebrafish. Other species not tested yet.
Specificity	Specific for homer 1a.

TO BE USED IN VITRO / FOR RESEARCH ONLY
NOT TOXIC, NOT HAZARDOUS, NOT INFECTIOUS, NOT CONTAGIOUS

Homer is a scaffolding protein of the post synaptic density (PSD) and enriched at excitatory synapses. The protein binds metabotropic glutamate receptors, TRPC1, proteins of the Shank family and others. By aggregating these proteins into clusters, homer was suggested to organize distinct signalling domains.
Three isoforms, **Homer 1**, 2 and 3 have been described. Each of these isoforms is subject to alternative splicing yielding the splice variants a, b, c, d.

Selected References SYSY Antibodies

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Banerjee A, Luong JA, Ho A, Saib AO, Ploski JE
Molecular autism (2016) 7: 16. **WB**

Homer1a drives homeostatic scaling-down of excitatory synapses during sleep.
Diering GH, Nirujogi RS, Roth RH, Worley PF, Pandey A, Huganir RL
Science (New York, N.Y.) (2017) 355(6324): 511-515. **WB; tested species: mouse**

Selected General References

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Neuron (1999) 23(3): 583-92.

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