

## Dynamin 3

**Cat.No. 115 303; 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 <sub>2</sub> O to get a 1mg/ml solution in PBS. Then aliquot and store at -20°C until use.
Applications	<b>WB:</b> 1 : 1000 up to 1 : 5000 (AP staining) <b>IP:</b> yes <b>ICC:</b> 1 : 500 <b>IHC:</b> 1 : 500 <b>IHC-P/FFPE:</b> 1 : 500
Immunogen	Synthetic peptide corresponding to AA 773 to 794 from mouse Dynamin3 (UniProt Id: Q8BZ98)
Reactivity	Reacts with: rat (Q08877), mouse (Q8BZ98). Other species not tested yet.
Specificity	Specific for dynamin 3.
matching control	115-3P

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

**Dynamin** was discovered because of its binding to microtubules. It was later shown not to function in the cytoskeleton but in endocytosis. Dynamin is required for clathrin - mediated endocytosis. It contains a NH<sub>2</sub> - terminal GTPase domain, a middle pleckstrin - homology domain, and a COOH-terminal proline - rich sequence. The COOH - terminal sequence binds to amphiphilin which contains a SH3 domain that recognizes the proline - rich sequence of dynamin.

There are at least three isoforms of dynamin: Dynamin 1 is enriched in synapses whereas dynamin 2 is ubiquitous and dynamin 3 is expressed in brain and testis. Neuronal dynamin 1 is phosphorylated by protein kinase C and dephosphorylated by calcineurin during an action potential in the nerve terminal. It is possible that the dephosphorylation provides a trigger for endocytosis.

### Selected General References

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