

Monoclonal Antibody to Dynamin-1

Cat. #: Mab-606045

Description:

Dynamin-1 (Dyn1), with 864-amino acid protein (about 95kDa), belongs to the dynamin family. Dynamin-1 (neuron-specific), dynamin-2 (ubiquitously expressed), and dynamin-3 (expressed only in the testis, brain, and lung), constitute the dynamin family. Members of the dynamin family are GTPase, microtubule-associated proteins which are involved in endocytosis, synaptic transmission and neurogenesis. Dynamin-1 is phosphorylated in nerve terminals exclusively in the cytosolic compartment and in vitro by protein kinase C. Dynamin-1 is a large GTPase enzyme required in membrane constriction and fission during multiple forms of endocytosis. Dynamin-1 is also a key molecule required for the recycling of synaptic vesicles in neurons, and it has been known that dynamin-1 gene expression is induced during neuronal differentiation.

Immunogen/Specificity:

Ni-NTA purified truncated recombinant Dynamin-1 expressed in E. Coli strain BL21 (DE3)

Applications :

Western Blot: 1: 500- 1: 2,000

IHC(P): 1: 500- 1: 2,000

IHC(F): 1: 500- 1: 2,000

ELISA: Propose dilution 1: 10,000

Determining optimal working dilutions by titration test.*

Formulation:

Crude ascites.

References

1. Annie Quan and Phillip J. Robinson
Methods Enzymol. 2005; 404:556-69.
2. Jiyun Yoo, Moon-Jin Jeong, Byoung-Mog Kwon
J. Biol. Chem., Mar 2002; 277: 11904 - 11909

Clone Number: 3G4B6

Isotype: IgG2a

Species: Human

Storage and Stability: at -20oC

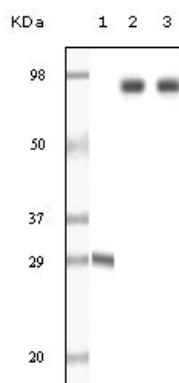
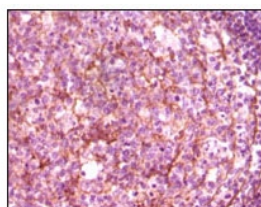
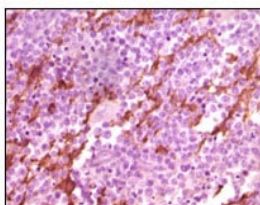


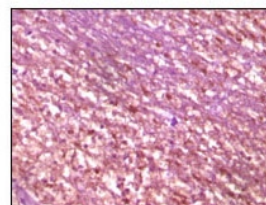
Figure 1: Western blot analysis using anti-Human Dynamin-1 monoclonal antibody against truncated Dynamin-1 recombinant protein (1), SK-N-SH (2) and NIH3T3 (3) cell lysate.^{4,5}



Human Lymph tissue



Human glioma tissue



Human cerebellum tissue

Figure 2: Immunohistochemical analysis of paraffin-embedded human Lymph tissue, glioma tissue and cerebellum tissue, showing membrane localization using Dynamin-1 antibody with DAB staining.