

Anti-Dynamin Dnm1 Antibody (Monoclonal, D5)

Catalog Number: M02536

About Dnm1

HSP27s belong to an abundant and ubiquitous family of small heat shock proteins (sHSP). It is an important HSP found in both normal human cells and cancer cells. The basic structure of most sHSPs is a homologous and highly conserved amino acid sequence, with an alpha-crystallin domain at the C-terminus and the WD/EPF domain at the less conserved N-terminus. This N-terminus is essential for the development of high molecular oligomers (1, 2). HSP27-oligomers consist of stable dimers formed by as many as 8-40 HSP27 protein monomers (3). The oligomerization status is connected with the chaperone activity: aggregates of large oligomers have high chaperone activity, whereas dimers have no chaperone activity (4). HSP27 is localized to the cytoplasm of unstressed cells but can redistribute to the nucleus in response to stress, where it may function to stabilize DNA and/or the nuclear membrane. Other functions include chaperone activity (as mentioned above), thermo tolerance in vivo, inhibition of apoptosis, and signal transduction. Specifically, in vitro, it acts as an ATP independent chaperone by inhibiting protein aggregation and by stabilizing partially denatured proteins, which ensures refolding of the HSP70 complex. HSP27 is also involved in the apoptotic signaling pathway because it interferes with the activation of cytochrome c/Apaf-1/dATP complex, thereby inhibiting the activation of procaspase-9. It is also hypothesized that HSP27 may serve some role in cross-bridge formation between actin and myosin (5). And finally, HSP27 is also thought to be involved in the process of cell differentiation. The up-regulation of HSP27 correlates with the rate of phosphorylation and with an increase of large oligomers. It is possible that HSP27 may play a crucial role in termination of growth (6).

Overview

Product Name	Anti-Dynamin Dnm1 Antibody (Monoclonal, D5)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-Dynamin Dnm1 Antibody (Monoclonal, D5) catalog # M02536. Tested in IP, WB applications. This antibody reacts with Human, Mouse, Rat.
Application	IP, WB
Clonality	Monoclonal D5
Formulation	Each vial contains 0.1mM PMSF and 50% glycerol.
Storage Instructions	Store at -20°C for one year. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P21575

Technical Details

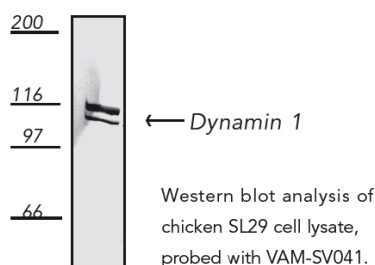
Immunogen	Recombinant His6-tagged human dynamin.
Predicted Reactive Species	Chimpanzee, Hamster
Cross Reactivity	Detects ~22kDa. Detects endogenous and exogenous HSP22 in monomeric, dimeric and tetrameric

	forms in WB. Does not cross react with alpha crystallin.
Isotype	IgG1 Kappa
Form	Liquid
Concentration	0.5-1mg/ml, actual concentration vary by lot. Use suggested dilution ratio to decide dilution procedure.
Purification	Protein G affinity purified.
Suggested Dilutions	<p>Dilute the sample so that the expected range of concentrations fall within the detection range of this kit.</p> <p>If the expected range of concentration is unknown, a pilot test should be conducted to decide the optimal dilution ratio for your samples.</p> <p>Some PubMed article(s) citing the expression level of this target are as follows:</p> <p>Boster Bio's internal QC testing used:</p> <p>WB, 0.5ug/ml, colorimetric, Human, Mouse, Rat</p>

Anti-Dynamin Dnm1 Antibody (Monoclonal, D5) (M02536) Images



Western blot analysis of Dynamin expression in MW marker (lane 1), mouse brain extract (lane 2) and rat brain extract (lane 3). Dynamin at 100KD was detected using mouse anti-Dynamin Antigen Affinity purified monoclonal antibody (Catalog # M02536) at 0.5 ug/ml. The blot was developed using colorimetric method.



Western blot analysis of Dynamin expression in chicken SL29 whole cell lysates (lane 1). Dynamin was detected using mouse anti-Dynamin Antigen Affinity purified monoclonal antibody (Catalog # M02536) at 0.5 ug/ml. The blot was developed using colorimetric method.

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