

## Anti-ARF1 Antibody (Monoclonal, ARFS 3F1)

Catalog Number: M01279

### About ARF1

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). For more information visit our HSP27 Scientific Resource Guide at <http://www.HSP27.com>.

### Overview

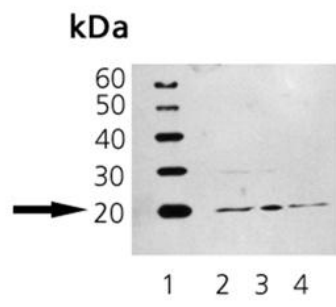
Product Name	Anti-ARF1 Antibody (Monoclonal, ARFS 3F1)
Reactive Species	Human, Mouse, Rat
Description	Boster Bio Anti-ARF1 Antibody (Monoclonal, ARFS 3F1) catalog # M01279. Tested in WB applications. This antibody reacts with Human, Mouse, Rat.
Application	WB
Clonality	Monoclonal ARFS 3F1
Formulation	Each vial contains 50% glycerol and 0.09% sodium azide.
Storage Instructions	Store at -20°C for one year. Avoid repeated freeze-thaw cycles.
Host	Mouse
Uniprot ID	P84077

### Technical Details

Immunogen	Synthetic peptide corresponding to the sequence near the C-terminus of human ARF1.
Predicted Reactive Species	Bovine, Goat, Guinea Pig, Hamster, Monkey, Sheep

Cross Reactivity	Detects ~27kDa. Has no cross-reactivity to Alpha B crystallin. Very limited cross-reactivity to other species.
Isotype	IgG2b 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, ECL, 1:250, Human, Mouse, Rat</p>

## Anti-ARF1 Antibody (Monoclonal, ARFS 3F1) (M01279) Images



Western blot analysis of ARF1 expression in MW marker (lane 1), rat brain extract (lane 2), mouse brain extract (lane 3) and MDCK whole cell lysates (lane 4). ARF1 was detected using mouse anti-ARF1 Antigen Affinity purified monoclonal antibody (Catalog # M01279) at 1:250. The blot was developed using chemiluminescence (ECL) method (Catalog # EK1001).

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