

**Datasheet for 200-301-E61****BIN1 Antibody****Overview**

|                      |                                                     |
|----------------------|-----------------------------------------------------|
| <b>Description:</b>  | Anti-BIN1 (MOUSE) Monoclonal Antibody - 200-301-E61 |
| <b>Item No.:</b>     | 200-301-E61                                         |
| <b>Size:</b>         | 100 µg                                              |
| <b>Applications:</b> | IF, WB                                              |
| <b>Reactivity:</b>   | Human, Mouse                                        |
| <b>Host Species:</b> | Mouse                                               |

**Product Details**

|                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Background:</b>   | Bin1 is a conserved member of the BAR family of genes that have been implicated in diverse cellular processes including endocytosis, actin organization, programmed cell death, stress responses, and transcriptional control. The first mammalian BAR protein to be discovered, Amphiphysin I (AmphI), was identified in an immunoscreen for proteins associated with the plasma membranes of synaptic neurons, functions in the control of clathrin-dependent synaptic vesicle endocytosis. The mammalian Bin1 gene was first identified in a two hybrid screen for polypeptides that bind to the N-terminal Myc box 1 (MB1) portion of the c-Myc oncoprotein. Bin1 is similar to AmphI in overall structure, with an N-terminal BAR domain and a C-terminal SH3 domain. However, the Bin1 gene is more complex than the AmphI gene, encoding at least seven different splice variants that differ widely in subcellular localization, tissue distribution, and ascribed functions. Alternate splicing of the Bin1 gene results in ten transcript variants encoding different isoform. Bin1 is expressed ubiquitously in mammalian cells. Certain splice variants of Bin1 are expressed in the neurons, muscle cells or tumor cells and play a role in cancer suppression. Studies in muscle cells suggest that Bin1 expression, structure, and localization are tightly regulated during muscle differentiation and suggested that Bin1 plays a functional role in the differentiation process. Defects in BIN1 are the cause of centronuclear myopathy autosomal recessive; also known as autosomal recessive myotubular myopathy. |
| <b>Synonyms:</b>     | mouse anti-BIN1 Antibody, AMPHL, Myc box-dependent-interacting protein 1, Amphiphysin II, Amphiphysin-like protein, Box-dependent myc-interacting protein 1, Bridging integrator 1, BIN 1, BIN-1, BIN1 antibody, anti-BIN1 antibody                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Host Species:</b> | Mouse                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Clonality:</b>    | Monoclonal                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Clone ID:</b>     | 99F                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

**Format:** IgG

## Target Details

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Gene Name:</b>          | BIN1                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Reactivity:</b>         | Human, Mouse                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Immunogen Type:</b>     | Recombinant Protein                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Immunogen:</b>          | Anti-BIN1 (MOUSE) Monoclonal Antibody was produced in mouse by repeated immunizations with BIN1 polypeptide followed by hybridoma development.                                                                                                                                                                                                                                                                                           |
| <b>Purity/Specificity:</b> | Anti-BIN1 was purified from concentrated tissue culture supernate by Protein G chromatography followed by extensive dialysis against the buffer stated above. BIN1 antibody is specific for human BIN1 protein. A BLAST analysis was used to suggest cross-reactivity with BIN1 from human and mouse sources based on 100% homology with the immunizing sequence. Cross-reactivity with BIN1 from other sources has not been determined. |
| <b>Relevant Links:</b>     | <ul style="list-style-type: none"><li>• <a href="#">GenelD - 274</a></li><li>• <a href="#">NCBI - NP_004296.1</a></li><li>• <a href="#">UniProtKB - O00499</a></li></ul>                                                                                                                                                                                                                                                                 |

## Application Details

|                             |                                                                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Tested Applications:</b> | IF, WB                                                                                                                                                 |
| <b>Application Note:</b>    | Anti-BIN1 antibody has been tested for use in ELISA, Western Blot, IP, and IF. Specific conditions for reactivity should be optimized by the end user. |
| <b>Assay Dilutions:</b>     | All assays should be optimized by the user. Recommended dilutions (if any) may be listed below.                                                        |
| <b>ELISA:</b>               | 1:5000 - 1:50000                                                                                                                                       |
| <b>IF:</b>                  | 1:100-1:500                                                                                                                                            |
| <b>IP:</b>                  | 10-100 $\mu$ L                                                                                                                                         |
| <b>WB:</b>                  | 1:500-1:1500                                                                                                                                           |

## Formulation

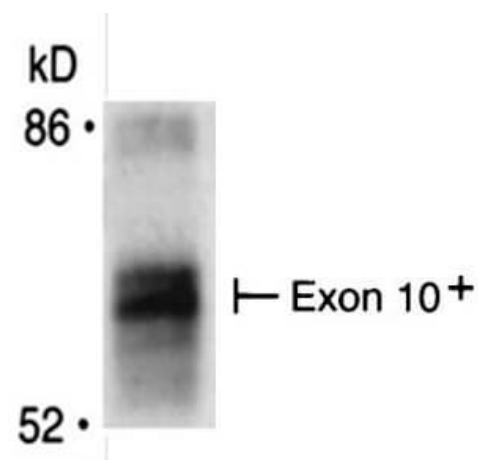
|                        |                                      |
|------------------------|--------------------------------------|
| <b>Physical State:</b> | Liquid (sterile filtered)            |
| <b>Concentration:</b>  | 1.0 mg/ml by UV absorbance at 280 nm |

|                      |                                                            |
|----------------------|------------------------------------------------------------|
| <b>Buffer:</b>       | 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2 |
| <b>Preservative:</b> | 0.01% (w/v) Sodium Azide                                   |
| <b>Stabilizer:</b>   | None                                                       |

## Shipping & Handling

|                            |                                                                                                                                                                                                                                                                                                                                               |
|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Shipping Condition:</b> | Dry Ice                                                                                                                                                                                                                                                                                                                                       |
| <b>Storage Condition:</b>  | Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use. |
| <b>Expiration:</b>         | Expiration date is one (1) year from date of receipt.                                                                                                                                                                                                                                                                                         |

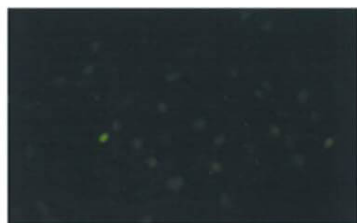
## Images



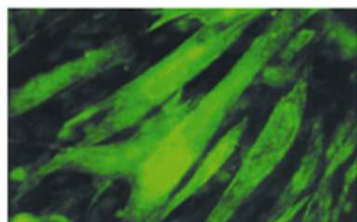
### Immunoprecipitation

Immunoprecipitation of Mouse anti-BIN1 antibody.  
 Immunoprecipitates were separated by SDS-PAGE and visualized by fluorography. The differentiation-associated (Exon 10+) form of Bin1 is recognized by using Bin1 (Exon 10 specific, 99F) monoclonal antibody. Lane 1: BIN1 [35µg].  
 Primary antibody: Anti-BIN1 (Exon 10 specific, 99F) monoclonal antibody at 1:400 for overnight at 2-8°C.  
 Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted MW: 64.7 kDa. Observed MW: ~65 kDa for BIN-1.

Growth



Differentiation

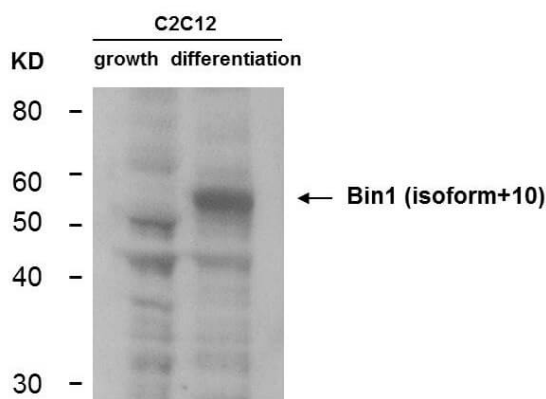


### Immunofluorescence Microscopy

Immunofluorescence Microscopy of Mouse Anti-BIN1 Antibody. Cells: C2C12 cells during growth or differentiation. Fixation: 0.5% PFA. Antigen retrieval: not required. Primary antibody: BIN-1 (Exon 10 specific, 99F) monoclonal antibody. Secondary antibody: mouse secondary antibody at 1:10,000 for 45 min at RT. Localization: BIN1 is nuclear and cytoplasmic. Staining: BIN 1 as green fluorescent signal.

### Western Blot

Western Blot of Mouse Anti-BIN1 antibody. Lane 1: C2C12 during growth. Lane 2: C2C12 during differentiation. Load: 35 µg per lane. Primary antibody: BIN1 antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight at 4°C. Predicted/Observed size: 64.7 kDa, ~55 kDa for BIN-1. Other band(s): non-specifics.



## Disclaimer

This product is for research use only and is not intended for therapeutic or diagnostic applications. Please contact a technical service representative for more information. All products of animal origin manufactured by Rockland Immunochemicals are derived from starting materials of North American origin. Collection was performed in United States Department of Agriculture (USDA) inspected facilities and all materials have been inspected and certified to be free of disease and suitable for exportation. All properties listed are typical characteristics and are not specifications. All suggestions and data are offered in good faith but without guarantee as conditions and methods of use of our products are beyond our control. All claims must be made within 30 days following the date of delivery. The prospective user must determine the suitability of our materials before adopting them on a commercial scale. Suggested uses of our products are not recommendations to use our products in violation of any patent or as a license under any patent of Rockland Immunochemicals, Inc. If you require a commercial license to use this material and do not have one, then return this material, unopened to: Rockland Inc., P.O. BOX 5199, Limerick, Pennsylvania, USA.