

## OriGene Technologies, Inc.

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## **Product datasheet for TA319580**

## **BIN1 Mouse Monoclonal Antibody [Clone ID: 99F]**

**Product data:** 

**Product Type:** Primary Antibodies

Clone Name: 99F

**Applications:** IF, IP, WB

Recommend Dilution: ELISA: 1:5000-1:50000, WB: 1:500-1:1500, IHC: 1:100-1:500, IP: 10-100 uL

Reactivity: Human, Mouse

Host: Mouse

Clonality: Monoclonal

Immunogen: Anti-BIN1 (MOUSE) Monoclonal Antibody was produced in mouse by repeated immunizations

with BIN1 polypeptide followed by hybridoma development.

**Formulation:** 0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2

**Gene Name:** bridging integrator 1

Database Link: NP 004296 Entrez Gene 30948 MouseEntrez Gene 274 Human

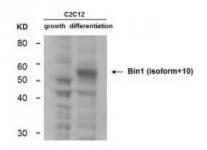
**Synonyms:** AMPH2; AMPHL; SH3P9

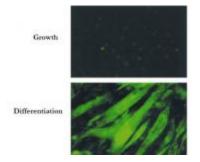


Note:

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 (Amphl), 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 Amphl in overall structure, with an N-terminal BAR domain and a C-terminal SH3 domain. However, the Bin1 gene is more complex than the Amphl 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.

## **Product images:**

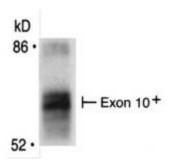




Western Blot of Mouse Anti-BIN1 antibody. Lane 1: C2C12 during growth. Lane 2: C2C12 during differentiation. Load: 35 ug per lane. Primary antibody: BIN1 antibody at 1:400 for overnight at 4°C. Secondary antibody: IRDye800™ mouse secondary antibody at 1:10,000 for 45 min at RT. Block: 5% BLOTTO overnight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

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.





IP of Mouse anti-BIN1 antibody. IP 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: BIN 1 Lane 2: none. Load: 35 ug per lane. Primary antibody: BIN-1 (Exon 10 specific, 99F) monoclonal 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.