For Research Use Only

ACTN2 Monoclonal antibody

Catalog Number:68223-1-lg 1 Publications



Basic Information

Catalog Number: 68223-1-lg

BC051770

GeneID (NCBI): Size:

1000 µg/ml

UNIPROT ID: Source: Mouse P35609 Full Name: Isotype: lgG2b actinin, alpha 2 Calculated MW: Immunogen Catalog Number:

AG5578 104 kDa Observed MW:

103 kDa

GenBank Accession Number:

Applications

Tested Applications:

WB, ELISA

Cited Applications:

WB

Species Specificity:

Human, mouse, rat, pig, rabbit

Cited Species: mouse

Purification Method: Protein A purification

CloneNo.: 1D5F9

Positive Controls:

Recommended Dilutions:

WB 1:20000-1:100000

WB: pig heart tissue, rat colon tissue, rabbit heart

tissue, rat heart tissue, mouse heart tissue, pig colon

Background Information

Alpha actinin 2 (ACTN2) belongs to the alpha-actinin family and is expressed in both skeletal and cardiac muscles and functions to anchor myofibrillar actin thin filaments and titin to Z-discs (PMID: 30701273). ACTN2 is an actinbinding protein with multiple roles in different cell types. In nonmuscle cells, the cytoskeletal isoform is found along microfilament bundles and adherens-type junctions, where it is involved in binding actin to the membrane. In contrast, skeletal, cardiac, and smooth muscle isoforms are localized to the Z disc and analogous dense bodies, where they help anchor the myofibrillar actin filaments. Mutations in ACTN2 are associated with hypertrophic cardiomyopathy, as well as dilated cardiomyopathy and endocardial fibroelastosis (PMID: 20022194, 14567970).

Notable Publications

Author **Pubmed ID** Journal Application Shan Gao iScience WB 38495825

Storage

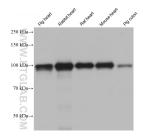
Storage:

Store at -20°C. Stable for one year after shipment.

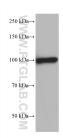
PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

Aliquoting is unnecessary for -20°C storage

Selected Validation Data



Various lysates were subjected to SDS PAGE followed by western blot with 68223-1-1g (ACTN2 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.



rat colon tissue were subjected to SDS PAGE followed by western blot with 68223-1-lg (ACTN2 antibody) at dilution of 1:50000 incubated at room temperature for 1.5 hours.