

Actin, pan Ab-5 (Clone ACTN05; same as C4)

Mouse Monoclonal Antibody

Cat. #MS-1295-P0, -P1, or -P (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Purified Ab with BSA and Azide)

Cat. #MS-1295-P1ABX or -PABX (0.1ml or 0.2ml at 1.0mg/ml) (Purified Ab without BSA and Azide)

Cat. #MS-1295-B0, -B1, or -B (0.1ml, 0.5ml, or 1.0ml at 200µg/ml) (Biotin-labeled Ab with BSA and Azide)

Cat. #MS-1295-PCL (0.1ml) (Positive Control for Western Blot)

Comments: Ab-5 reacts with all six known vertebrate isoforms of actin (MW~42kDa). It also reacts with two cytoplasmic actins (β , γ) which are highly homologous to one another but which differ from the muscle actins at about 25 amino acid residues. Ab-5 is highly recommended for monitoring total protein load on Western blots.

Epitope: Not determined

Species Reactivity: Human, Cow, Mouse, Dog, Pig, Rabbit, Rat, Chicken, *Dictyostelium discoideum*, *Physarum polycephalum*. Others-not known.

Clone Designation: ACTN05; same as C4.

Ig Isotype / Light Chain: IgG₁ / κ

Immunogen: Chicken gizzard actin

Applications and Suggested Dilutions:

- Immunoprecipitation (Denatured verified)
(Use Protein G) (Ab 2µg/mg protein lysate)
- Western Blotting (0.5µg/ml for 2hrs at RT)
- Immunohistology (formalin/paraffin)
(Use at 1:50 for 30 min with LV's UltraVision.
[Staining of formalin-fixed, paraffin-embedded tissues requires boiling tissue sections in 10mM citrate buffer, pH 6.0 for 10-20 min followed by cooling at RT for 20 min.]

The optimal dilution for a specific application should be determined by the investigator.

Positive Control: HeLa cells., Skeletal muscle

Cellular Localization: Cytoplasmic

Supplied As:

200µg/ml of antibody purified from ascites fluid by Protein G chromatography. Prepared in 10mM PBS, pH 7.4, with 0.2% BSA and 15mM sodium azide. Also available without BSA and azide at 1mg/ml.

Storage and Stability: Ab with sodium azide is stable for 24 months when stored at 2-8°C. Antibody

WITHOUT sodium azide is stable for 36 months when stored at below 0°C.

Key References:

1. Lessard J. (1988) Two Monoclonal antibodies to actin: One muscle reactive and one generally reactive. Cell Motility and Cytoskeleton 10: 349-362.

Limitations and Warranty:

Our products are intended FOR RESEARCH USE ONLY and are not approved for clinical diagnosis, drug use or therapeutic procedures. No products are to be construed as a recommendation for use in violation of any patents. We make no representations, warranties or assurances as to the accuracy or completeness of information provided on our data sheets and website. Our warranty is limited to the actual price paid for the product. NeoMarkers is not liable for any property damage, personal injury, time or effort or economic loss caused by our products.

Material Safety Data:

This product is not licensed or approved for administration to humans or to animals other than the experimental animals. Standard Laboratory Practices should be followed when handling this material. The chemical, physical, and toxicological properties of this material have not been thoroughly investigated. Appropriate measures should be taken to avoid skin and eye contact, inhalation, and ingestion. The material contains 0.09% sodium azide as a preservative. Although the quantity of azide is very small, appropriate care should be taken when handling this material as indicated above. The National Institute of Occupational Safety and Health has issued a bulletin citing the potential explosion hazard due to the reaction of sodium azide with copper, lead, brass, or solder in the plumbing systems. Sodium azide forms hydrazoic acid in acidic conditions and should be discarded in a large volume of running water to avoid deposits forming in metal drainage pipes.

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