

Direct-Blot™ HRP anti-β-actin Antibody

Catalog# / Size	664803 / 25 µL 664804 / 100 µL
Clone	W16197A
Regulatory Status	RUO
Other Names	ACTB, Actin, cytoplasmic 1, Beta-actin
Isotype	Rat IgG2a, κ
Description	β-actin is a ubiquitously expressed and highly conserved 42 kD cytoplasmic protein involved in cell motility. This critical cytoskeletal component can be disrupted by drugs such as cytochalasin. Because β-actin is ubiquitously expressed in all eukaryotic cells, it is frequently used as a loading control for assays involving protein detection (such as Western blotting).

Product Details

Verified Reactivity	Human, Mouse, Rat, Zebrafish, Drosophila
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Human ACTB peptide (1-13 a.a.).
Formulation	This antibody is provided in 50% glycerol in aqueous buffered solutions with preservatives.
Preparation	The antibody was purified by affinity chromatography and conjugated with HRP under optimal conditions.
Concentration	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.)
Storage & Handling	Upon receipt, the antibody solution should be stored undiluted at -20°C, and protected from prolonged exposure to light.
Application	WB - Quality tested
Recommended Usage	Each lot of this antibody is quality control tested by Western blotting . For Western blotting, the suggested use of this reagent is 0.001 - 0.01 µg per ml (1:10,000 - 1:100,000 dilution). It is recommended that the reagent be titrated for optimal performance for each application. 25 µl and 100 µl of Direct-Blot™ HRP antibody can be used for approximately 5 and 20 Western blots, respectively, at the recommended concentration/dilution.
Application Notes	Reactivity to Drosophila was only verified with the purified format.
Product Citations	1. Li Y, <i>et al.</i> 2020. Stem Cell Res Ther. 0.815972222. PubMed
RRID	AB_2810693 (BioLegend Cat. No. 664803) AB_2728496 (BioLegend Cat. No. 664804)

Antigen Details

Structure	375 amino acids with a predicted molecular weight of 42 kD.
Distribution	Cytoplasm
Function	Actins are highly conserved proteins that are involved in cell motility.
Interaction	Interacts with CPNE1 and CPNE4, ERBB2, GCSAM, TBC1D21.

Biology Area Cell Biology, Cell Motility/Cytoskeleton/Structure, Neuroscience, Neuroscience Cell Markers

Molecular Family Microfilaments

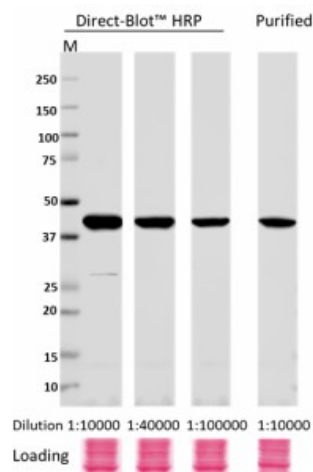
Antigen References
1. Hanukoglu I, *et al.* 1983. *J. Mol. Biol.* 163:673.
2. Nakajima-Iijima S, *et al.* 1985. *Proc. Natl. Acad. Sci.* 82:6133.
3. Ponte P, *et al.* 1984. *Nucleic Acids Res.* 12:1687.

Gene ID [60](#)

Other Formats

Purified anti- β -actin, Direct-Blot™ HRP anti- β -actin

Product Data



Whole cell lysates (15 μ g protein) from HeLa was resolved by electrophoresis (4-20% Tris-glycine gel), transferred to nitrocellulose, and probed with 1:10,000 diluted (0.01 μ g/mL), 1:40,000 diluted (0.0025 μ g/mL), 1:100,000 diluted (0.001 μ g/mL) Direct-Blot™ HRP anti- β -actin Antibody, clone W16197A, and 1:10,000 diluted (0.01 μ g/mL) purified anti- β -actin Antibody, clone W16197A (Cat. No. 664801) (upper). Proteins were visualized using an 1:3000 diluted HRP anti rat-IgG secondary antibody (Cat. No.405405) for purified anti- β -actin Antibody and chemiluminescence detection. Ponceau S staining was used as loading control (lower). Lane M: MW ladder.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, www.biolegend.com/ordering#license). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 www.biolegend.com
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587