

## Purified anti- $\beta$ -actin

**Catalog # / Size:** 622101 / 50  $\mu$ l (5 Western blots)  
622102 / 200  $\mu$ l (20 Western blots)

**Clone:** Poly6221

**Isotype:** Rabbit IgG

**Immunogen:** Peptide-KLH, NH2 terminus

**Reactivity:** Mouse, Rat, Human

**Preparation:** The antibody was purified by affinity chromatography.

**Formulation:** This antibody is provided in phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 50% glycerol.

**Storage:** Upon receipt, store frozen at -20° C.

## Applications:

**Applications:** WB - *Quality tested*  
IF, IHC - *Validated*

**Recommended Usage:** Each lot of this antibody is quality control tested by Western blotting. Western blotting, suggested working dilution(s): Use 10  $\mu$ l per 5 ml antibody dilution buffer for each mini-gel. For immunofluorescence microscopy: Use a dilution range of 1:100~1:400. For IHC, use a 1:100 dilution of antibody for staining. Antigen retrieval for IHC of formalin-fixed paraffin-embedded tissue using 0.01 M sodium citrate buffer is recommended. It is recommended that the reagent be titrated for optimal performance for each application.

**Application References:**

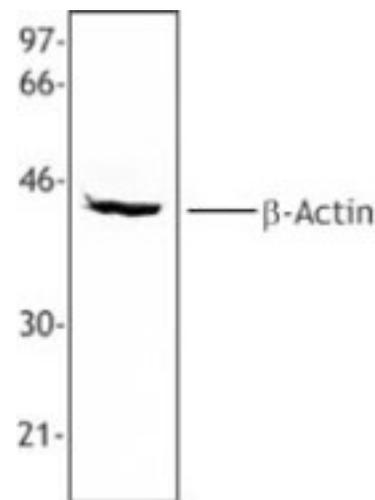
1. Lawson BR, *et al.* 2007. *J. Immunol.* 178:5366.
2. Joyce CW. 2006. *J. Biol. Chem.* 281:33053.
3. Yanagiya T, *et al.* 2007. *Obesity.* 15:572. PubMed
4. Kishida T, *et al.* 2007. *J. Immunol.* 179:8554. PubMed
5. Ouimet M, *et al.* 2008. *Arterioscler Thromb Vasc Biol.* 28:1144. PubMed
6. Tolitt LJ, *et al.* 2008. *J. Immunol.* 181:2165. PubMed
7. Sawada T, *et al.* 2008. *J. Biol. Chem.* 283:26820. PubMed
8. Ikeda D, *et al.* 2008. *Endocrinology.* 149:6037. PubMed
9. Rahman MK, *et al.* 2010. *J. Immunol.* 184:7247. PubMed
10. Shikama Y, *et al.* 2011. *Innate Immun.* 17:3. PubMed
11. Zhang Y, *et al.* 2012. *Am J Physiol Renal Physiol.* 302:70. PubMed
12. Piao X, *et al.* 2012. *Sci Signal.* 5:93. PubMed

**Description:**  $\beta$ -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  $\beta$ -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). The Poly6221 antibody has been shown to be useful for Western blotting of mouse, rat, and human  $\beta$ -actin.

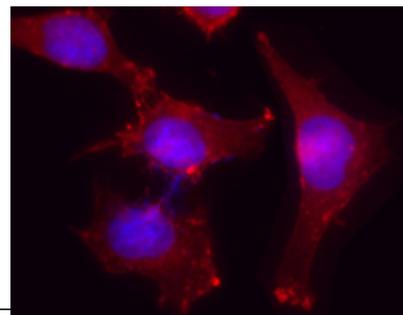
**Antigen References:**

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.

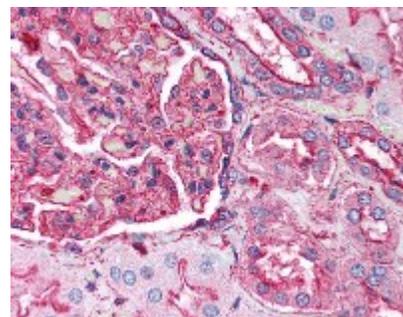
Related Products:	Product	Clone	Application
	HRP Donkey anti-rabbit IgG (minimal x-reactivity)	Poly4064	ELISA, IHC, WB



*HeLa cell extract was western blotted with Poly6221. Proteins were visualized using a HRP donkey anti-rabbit antibody and a chemiluminescence detection system.*



*Immunofluorescent microscope analysis of HeLa cells using Poly6221, followed by Rhodamine Red-X goat anti-rabbit IgG and DAPI.*



*Formalin-fixed paraffin-embedded human kidney tissue was stained with Poly6221 and developed with an alkaline phosphatase chromogen substrate (red color). Tissue was counterstained with H&E (blue/pink). Magnification, 40X.*



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