

## Product datasheet

anti-beta-actin mouse monoclonal, clone AC-15, liquid, purified

### Short overview

<b>Cat. No.</b>	690974
<b>Quantity</b>	1 ml (100 µg/ml)
<b>Concentration</b>	100 µg/ml (100 µg)

### Product description

<b>Host</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Isotype</b>	IgG1
<b>Clone</b>	AC-15
<b>Immunogen</b>	Synthetic b-cytoplasmic actin
<b>Formulation</b>	PBS, pH 7.4 with 0.09% sodium azide and 0.5% BSA
<b>UniprotID</b>	P62739 (Bovine), P08023 (Chicken), P62736 (Human), P62737 (Mouse), P62738 (Rat)
<b>Synonym</b>	Actin, aortic smooth muscle, Alpha-actin-2, Cell growth-inhibiting gene 46 protein [Cleaved into: Actin, aortic smooth muscle, intermediate form], ACTA2, ACTSA, ACTVS, GIG46
<b>Conjugate</b>	Unconjugated
<b>Purification</b>	Affinity chromatography
<b>Storage</b>	2-8°C
<b>Intended use</b>	Research use only
<b>Application</b>	IHC, WB
<b>Reactivity</b>	Human

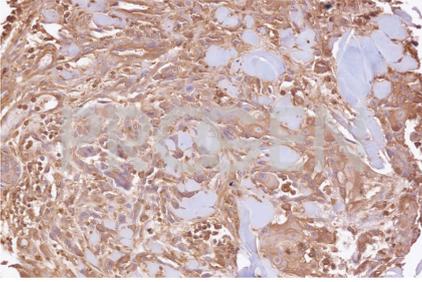
### Applications

<b>Immunohistochemistry (IHC) - paraffin</b>	1:50-1:500 (0.2-2 µg/ml; microwave treatment recommended)
<b>Western Blot (WB)</b>	1:5,000 (20 ng/ml)

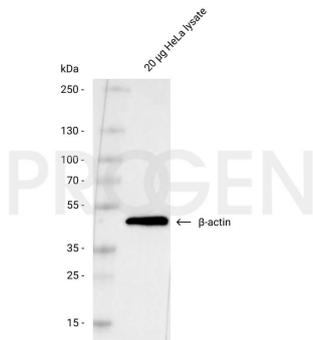
### Background

Beta-Actin (42 kDa) is a highly conserved protein, which is able to polymerize to produce filaments. It is involved in cell motility, structure and integrity. Beta-Actin is a commonly used as a loading control for Western blotting or as a housekeeping gene standard in qPCR.

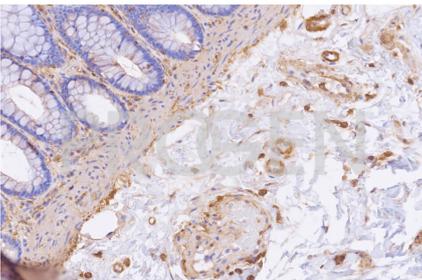
### Product images



IHC analysis of human head and neck squamous cell carcinoma using anti-beta-actin antibody (Cat. No. 690974). IHC was performed on formalin fixed paraffin embedded sections. The samples were deparaffinized with xylol and ethanol followed by heat induced antigen retrieval with 10 mM citrate buffer. After preparation the tissue was blocked with normal serum for 20 min at RT. The primary antibody anti-beta-actin mouse monoclonal, clone AC-15 was diluted in PBS (antibody concentration 500 ng/ml) and incubated at 4°C over-night. The secondary antibody ImmPRESS HRP anti-mouse IgG was incubated for 20 min at RT. Slides were incubated with DAB solution until a brown staining is visible and with Haemalaun for a few minutes. The 20x picture was acquired using microscopy (courtesy of J. Hess, University Hospital Heidelberg).



Western blot analysis of HeLa lysate with anti-beta-actin antibody. Western blot analysis was performed on 20 µg HeLa lysate. Cells were lysed with RIPA buffer. The PVDF membrane was blocked with 5% dry milk in PBST (PBS + 0.1% Tween 20) for 1 h at RT. The primary antibody anti-beta-actin antibody mouse monoclonal, clone AC-15 (Cat. No. 690974) was diluted in blocking buffer (antibody concentration 0.02 µg/ml) and incubated for 1 h at RT. The secondary antibody anti-mouse IgG goat polyclonal, HRP conjugate was also diluted in blocking buffer (antibody concentration 0.4 µg/ml) and incubated for 1 h at RT. The bands were visualized by chemiluminescent detection using Pierce™ ECL Western Blotting Substrate.



IHC analysis of human colon using anti-beta-actin antibody. IHC was performed on formalin fixed paraffin embedded sections. The samples were deparaffinized with xylol and ethanol followed by heat induced antigen retrieval with 10 mM citrate buffer. After preparation the tissue was blocked with normal serum for 20 min at RT. The primary antibody anti-beta-actin mouse monoclonal, clone AC-15 (Cat. No. 690974) was diluted in PBS (antibody concentration 500 ng/ml) and incubated at 4°C over-night. The secondary antibody HRP anti-mouse IgG was incubated for 20 min at RT. Slides were incubated with DAB solution until a brown staining is visible and with Haemalaun for a few minutes. The 20x picture was acquired using microscopy (courtesy of J. Hess, University Hospital Heidelberg).