

## Alpha Actin 2 Recombinant Rabbit Monoclonal Antibody Product Datasheet

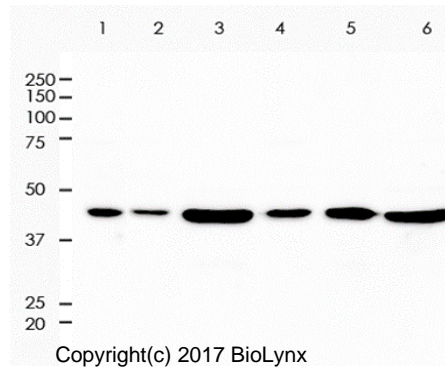
Catalog# BX00041

Clone# RR645

**Predicted Molecular Wt:** 42kDa **Purity:** ProA affinity purified IgG  
**Species Cross-reactivity:** Hu, Mu, Rat, Bovine, Dog, Pig, Zebrafish, Green monkey **Form:** Liquid  
*Species cross-reactivity determined by WB* **Swissprot ID:** P62736  
**Applications:** WB IHC-P IF/ICC FC

### Background:

Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells.



All lanes: Anti-Alpha Actin 2 antibody at 1:2,000 dilution  
 Predicted MW: 42 kDa  
 Observed MW: 42 kDa  
 Lane 1: HeLa  
 Lane 2: HaCat  
 Lane 3: 293  
 Lane 4: LnCap  
 Lane 5: PC-3  
 Lane 6: T47D  
 Lysate at 10 µg per lane  
 2nd Ab:  
 G&R HRP(H+L) 1:10,000

### Immunogen:

A synthetic peptide corresponding to residues on the N-terminus of human Alpha Actin 2 was used as an immunogen.

### Storage Buffer:

PBS 59%, Sodium azide 0.01%, Glycerol 40%, BSA 0.05%.

### Storage conditions:

-20°C.

### Storage instructions:

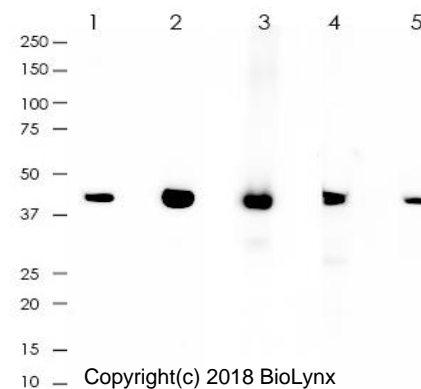
Shipped on blue ice. Upon delivery, aliquot, and store at -20°C. Avoid freeze / thaw cycles.

### Recommended Dilutions:

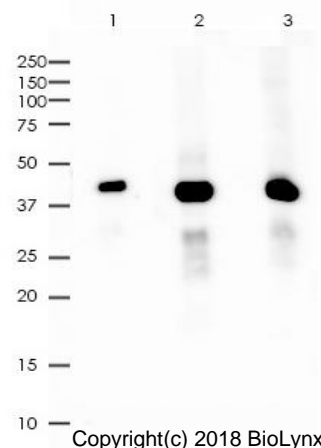
WB: 1:1,000 - 1:2,000  
 IHC-P: 1:2,000 - 1:4,000  
 IF/ICC: 1:80 - 1:200  
 FC: 1:20 - 1:100

### Background References:

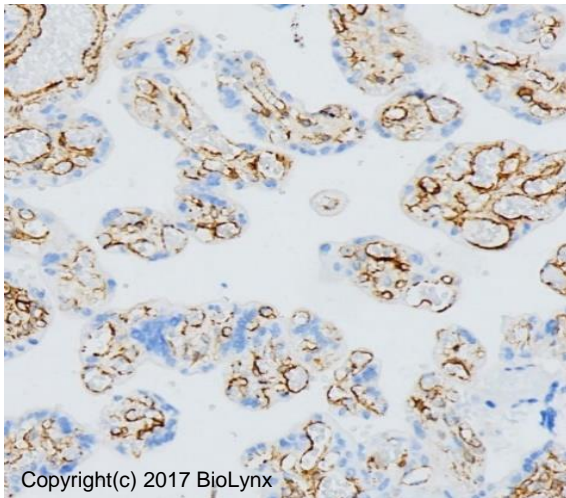
- Chen X., Sci Rep 7:40958 (2017).
- Vermillion MS., Nat Commun 8:14575 (2017).



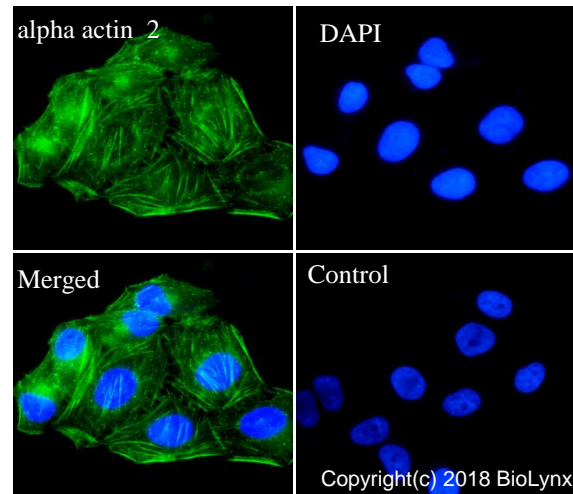
All lanes: Anti-Alpha Actin 2 antibody at 1:2,000 dilution  
 Predicted MW: 42 kDa  
 Observed MW: 42 kDa  
 Lane 1: MDCK  
 Lane 2: MDBK  
 Lane 3: Pig Heart  
 Lane 4: Zebrafish  
 Lane 5: Cos-7  
 Lysate at 10 µg per lane  
 2nd Ab:  
 G&R HRP(H+L) 1:10,000



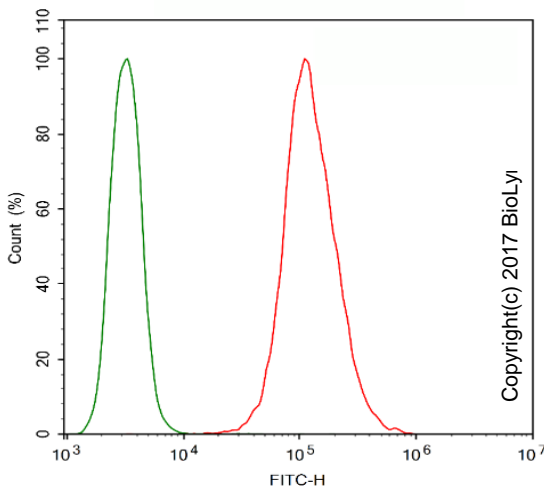
All lanes: Anti-Alpha Actin 2 antibody at 1:2,000 dilution  
 Predicted MW: 42 kDa  
 Observed MW: 42 kDa  
 Lane 1: Mu Brain  
 Lane 2: Rat Kidney  
 Lane 3: Rat Liver  
 Lysate at 10 µg per lane  
 2nd Ab:  
 G&R HRP(H+L) 1:10,000  
 Exposure: 120s



Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of placenta labelling Alpha Actin 2 with RR645 at 1:2,000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.



RR645 staining Alpha Actin 2 in HeLa cells by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:200) at 4°C. An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG polyclonal was used as the secondary antibody (1:500). DAPI (blue) was used as the nuclear counter stain. Control: PBS and secondary antibody, An Alexa Fluor® 488-conjugated Goat Anti-Rabbit IgG (1:500).



Overlay histogram showing HeLa cells stained with RR645 (Red). The cells were fixed with 4% paraformaldehyde (10 min) and then permeabilized with 0.1% TritonX-100 for 15 min. The cells were then incubated in the antibody (RR645, 1:100 dilution) in 1x PBS/1% BSA for 30 min at 4°C. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at 4°C. Unlabelled sample (Green) was used as a control.

Product QC'd by:



**For research use only. Not for use in diagnostic or therapeutic applications.**