

**Alpha smooth muscle actin  
 Recombinant Rabbit Monoclonal Antibody  
 Product Datasheet**

Catalog# BX00010

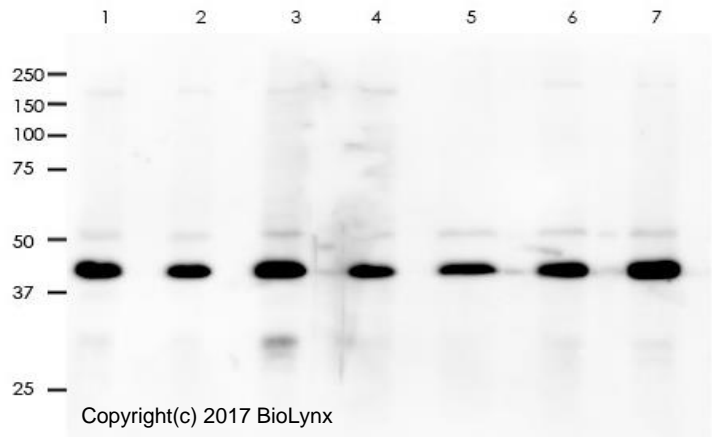
Clone# RR608

**Predicted Molecular Wt:** 42kDa  
**Species Cross-reactivity:** Human Mouse Rat  
*Species cross-reactivity determined by WB*  
**Applications:** WB IHC-P IF/ICC FC IP

**Purity:** ProA affinity purified IgG  
**Form:** Liquid  
**Swissprot ID:** P62736

**Background:**

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



**Immunogen:**

A synthetic peptide corresponding to residues on the C-terminus of human alpha smooth actin 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: 1:2,000 - 1:5,000  
 IHC-P: 1:1,000 - 1:2,000  
 IF/ICC: 1:800 - 1:2,000  
 FC: 1:200 - 1:1,000  
 IP: 1:10

**Background References:**

1. Chen X., Sci Rep 7:40958 (2017).

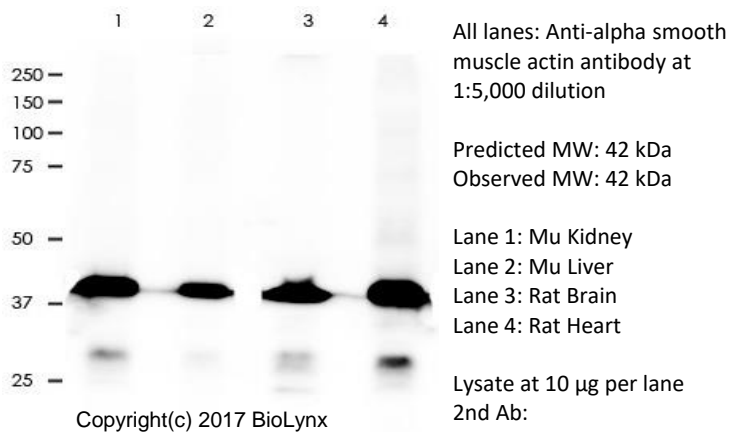
2. Vermillion MS., Nat Commun 8:14575 (2017).

All lanes: Anti-alpha smooth muscle actin antibody at 1:2,000 dilution

Lane 1: HeLa  
 Lane 2: JurKat  
 Lane 3: HEK293  
 Lane 4: HaCat  
 Lane 5: PC-12  
 Lane 6: MCF-7  
 Lane 7: 3T3

Predicted MW: 42 kDa  
 Observed MW: 42 kDa

Lysate at 10 µg per lane  
 2nd Ab:  
 G&R HRP(H+L) 1:10,000  
 Exposure: 90s

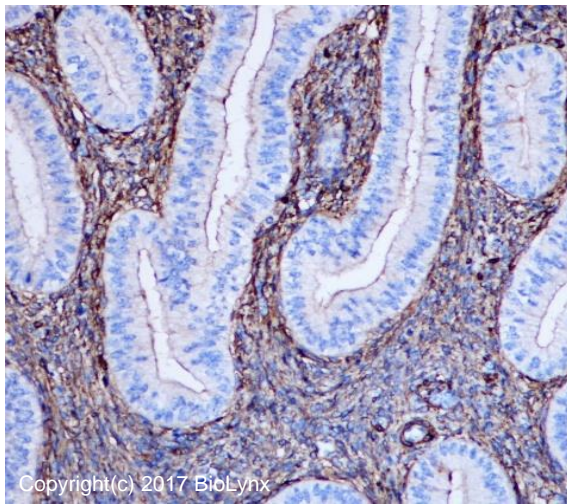


All lanes: Anti-alpha smooth muscle actin antibody at 1:5,000 dilution

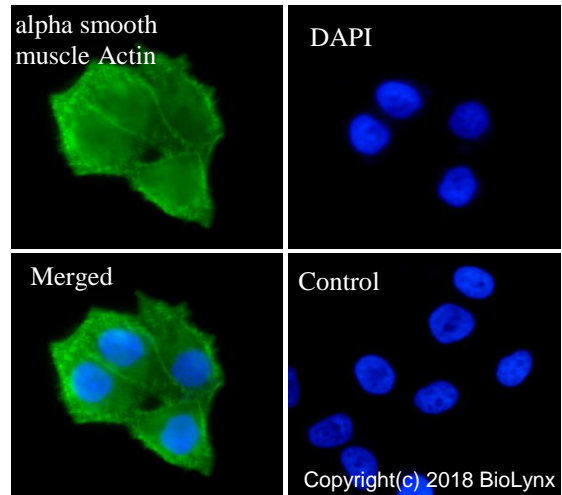
Predicted MW: 42 kDa  
 Observed MW: 42 kDa

Lane 1: Mu Kidney  
 Lane 2: Mu Liver  
 Lane 3: Rat Brain  
 Lane 4: Rat Heart

Lysate at 10 µg per lane  
 2nd Ab:  
 G&R HRP(H+L) 1:10,000  
 Exposure: 100s

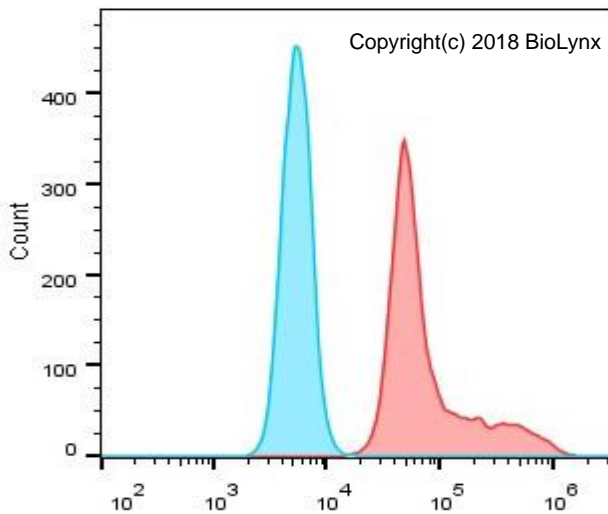


Immunohistochemistry (Formalin/PFA-fixed paraffin-embedded sections) analysis of human uterus tissue labelling alpha smooth muscle actin with RR608 at 1:1,000. Heat mediated antigen retrieval was performed using Tris/EDTA buffer pH 9.0.

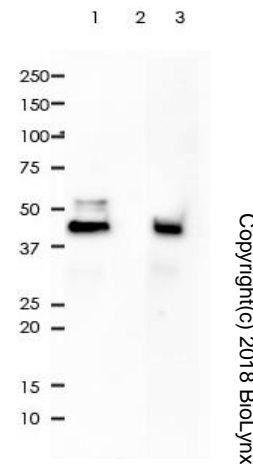


RR608 staining alpha smooth muscle actin in HeLa cells by IF/ICC (immunofluorescence/immunocytochemistry). Cells were fixed with paraformaldehyde, permeabilized with 0.1% Triton X-100 and blocked with 10% goat serum for half an hour at room temperature. Samples were incubated with primary antibody (1:2,000) 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 RR608 (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 (RR608, 1:1,000 dilution) in 1x PBS/1% BSA for 30 min at room temperature. The secondary antibody used was a Goat Anti-Rabbit Alexa Fluor® 488 (IgG H+L) at 1:2,000 dilution for 20 min at room temperature. Unlabelled sample (Blue) was used as a control.




Alpha smooth muscle actin was immunoprecipitated from 0.4mg of HeLa whole cell lysate with RR608 at 1:10 dilution.

2nd Ab:  
 GAR HRP for IP 1:500

Lane 1: RR608 IP in HeLa whole cell lysate  
 Lane 2: PBS instead of RR608 in HeLa whole cell lysate  
 Lane 3: HeLa whole cell lysate, 10 µg (input)

Exposure: 70s

Product QC'd by: 

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