For Research Use Only

## smooth muscle actin specific Recombinant antibody, PBS Only



Catalog Number:80008-1-PBS

**Featured Product** 

**Basic Information** 

Catalog Number:

GenBank Accession Number: NM\_001613

**Purification Method:** 

80008-1-PBS

GeneID (NCBI):

Protein A purification

Size:

CloneNo.:

1 mg/ml Source: Rabbit

Isotype:

**UNIPROT ID:** P62736

Full Name:

actin, alpha 2, smooth muscle, aorta

Calculated MW:

42 kDa

Observed MW:

42 kDa

**Applications** 

**Tested Applications:** 

WB,Indirect ELISA,IHC,IF,FC

Species Specificity:

Human, mouse, rat, chicken, pig, zebrafish

**Background Information** 

ACTA2 (also known as  $\alpha$  -smooth muscle actin or  $\alpha$  -SMA) belongs to the actin family. Actins are highly conserved proteins that are involved in various types of cell motility and are ubiquitously expressed in all eukaryotic cells. ACTA2 is primarily expressed in vascular smooth muscle and anti-ACTA2 is commonly used to marker smooth muscle cells.

Storage

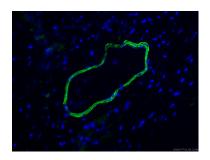
Storage:

Store at -80°C.

Storage Buffer:

PBS Only

## Selected Validation Data

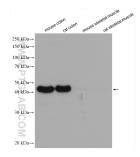


Immunofluorescent analysis of (4% PFA) fixed mouse heart tissue using 80008-1-RR (smooth muscle actin specific antibody), at dilution of 1:200 and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+1). This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.

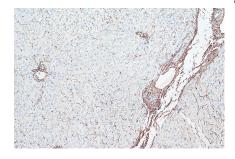


E14.5 FFPE mouse embryo section stained for smooth muscle actin (red, Cat. No 80008-1-RR) and alpha tubulin (green, Cat. CL488-66031). The alpha tubulin was conjugated to Coralite-488 fluorescent dye. In red, you can see muscle tissue clearly stained including the tongue, heart, and arteries. Nerves and neurons are stained green since they are rich in tubulin. Image credit:

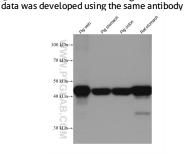
@Immunofluorescence on Instagram This



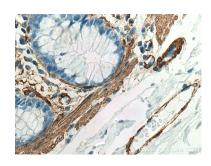
Various lysates were subjected to SDS PAGE followed by western blot with 80008-1-RR (smooth muscle actin specific antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



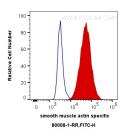
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 80008-1-RR (smooth muscle actin specific antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



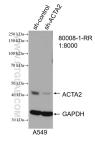
Various lysates were subjected to SDS PAGE followed by western blot with 80008-1-RR (smooth muscle actin specific antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



Immunohistochemical analysis of paraffinembedded human colon tissue slide using 80008-1-RR (a-SMA specific antibody) at dilution of 1:3000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



1X10^6 C2C12 cells were intracellularly stained with 0.4 ug Anti-Human smooth muscle actin specific (80008-1-RR, Clone:5H7) and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit 1gG(H+L) at dilution 1:1000 (red), or 0.4 ug Control Antibody. Cells were fixed with 4% PFA and permeabilized with Flow Cytometry Perm Buffer (PF00011-C). This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



WB result of smooth muscle actin specific antibody (80008-1-RR; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-smooth muscle actin specific transfected A549 cells. This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.