For Research Use Only

Alpha smooth muscle actin specific Recombinant antibody, PBS Only

Catalog Number:80008-1-PBS Featured Product



Purification Method:

Protein A purification

CloneNo.:

Basic Information

Catalog Number: GenBank Accession Number: 80008-1-PBS NM_001613

Concentration: GeneID (NCBI): 1 mg/ml 59

Source: UNIPROT ID: Rabbit P62736
Isotype: Full Name:

gG actin, alpha 2, smooth muscle, aorta

Calculated MW: 42 kDa Observed MW: 42 kDa

Applications

Tested Applications:

WB, IHC, IF-P, IF-Fro, FC (Intra), Indirect ELISA

Species Specificity:

human, mouse, rat, pig, chicken, 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.

The product is shipped with ice packs. Upon receipt, store it immediately at -80°C Storage Buffer:

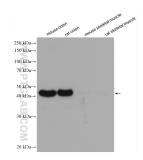
PBS only, pH7.3

Selected Validation Data

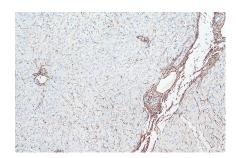


E14.5 FFPE mouse embryo section stained for smooth muscle actin (red, Cat. No 80008-1-RR) and alpha tubulin (green, Cat. CL488-66031). The alpha tubulin was conjugated to Coralite-488 fluorescent dye. In red, you can see muscle tissue clearly stained including the tongue, heart, and arteries. Nerves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

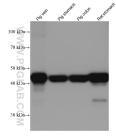
@Immunofluorescence on Instagram This data was developed using the same antibody



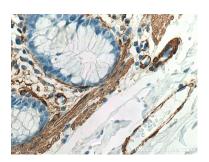
Various lysates were subjected to SDS PAGE followed by western blot with 80008-1-RR (smooth muscle actin specific antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



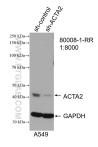
Immunohistochemical analysis of paraffinembedded human liver tissue slide using 80008-1-RR (smooth muscle actin specific antibody) at dilution of 1:5000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-1-PBS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



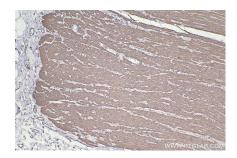
Various lysates were subjected to SDS PAGE followed by western blot with 80008-1-RR (smooth muscle actin specific antibody) at dilution of 1:100000 incubated at room temperature for 1.5 hours. This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



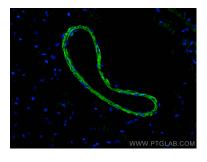
Immunohistochemical analysis of paraffinembedded human colon tissue slide using 80008-1-RR (a-SMA specific antibody) at dilution of 1:3000 (under 40x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-1-PBS in a different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



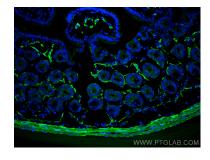
WB result of smooth muscle actin specific antibody (80008-1-RR; 1:8000; incubated at room temperature for 1.5 hours) with sh-Control and sh-smooth muscle actin specific transfected A549 cells. This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



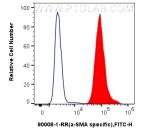
Immunohistochemical analysis of paraffinembedded human rectal cancer tissue slide using 80008-1-RR (smooth muscle actin specific antibody) at dilution of 1:10000 (under 10x lens). Heat mediated antigen retrieval with Tris-EDTA buffer (pH 9.0). This data was developed using the same antibody clone with 80008-1-PBS in a different storage buffer formulation.



Immunofluorescent analysis of (4% PFA) fixed paraffin-embedded mouse heart tissue using smooth muscle actin specific antibody (80008-1-RR, Clone: 5H7) at dilution of 1:1000 and CoraLite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2). 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.



Immunofluorescent analysis of (4% PFA) fixed frozen OCT-embedded mouse small intestine tissue using Alpha smooth muscle actin specific antibody (80008-1-RR, Clone: 5H7) at dilution of 1:400 and CoraLite® 488-Conjugated Goat Anti-Rabbit IgG(H+L) (SA00013-2). 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 0.5 ug smooth muscle actin specific Recombinant antibody (80008-1-RR, Clone:5H7) and Coralite® 488-Conjugated AffiniPure Goat Anti-Rabbit IgG(H+L) (SA00013-2)(red), or 0.5 ug Isotype Control (blue). 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.